COUNTWAY LIBRARY
HC 18GT /

FOREIGN BODIES
IN
AIR AND FOOD PASSAGES

CHEVALIER JACKSON

Digitized by the Internet Archive
in 2025

https://archive.org/details/foreignbodiesina0000chev

FOREIGN BODIES

IN THE

AIR AND FOOD PASSAGES

Charted Experience in Cases from No. 631 to No. 1155

AT THE

Bronchoscopic Clinic

BOSTON MEDICAL LIBRARY
IN THE
FRANCIS A. COUNTWAY
LIBRARY OF MEDICINE

BY

CHEVALIER JACKSON, M. D., SC. D., F. A. C. S.

PHILADELPHIA, PA.

AWARDED THE RESEARCH FUND PRIZE BY THE

AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY

REPRINTED FROM
THE TRANSACTIONS OF THE SOCIETY

1923

REYNOLDS THE PRINTER
NEW BEDFORD, MASS.
1924

TO THE MEMORY OF

MY MOTHER

THIS BOOK IS DEDICATED

FOREIGN BODIES IN THE AIR AND FOOD PASSAGES. CHARTED EXPERIENCE IN CASES AT THE BRONCHOSCOPIC CLINIC.*

By CHEVALIER JACKSON, M. D., Sc. D., Philadelphia, Pa.

One of the greatest shortcomings of medical literature is its unavailability for instant reference in urgent, daily, clinical work. When a surgeon meets with disaster he has the literature searched and there is brought to him a stack of pamphlets and journals that require weeks for perusal. In them he finds that other surgeons have met the same disaster and have suggested means of avoidance. This is learned *after* not *before* disaster, which has perhaps cost human life. The surgeon perhaps publishes his case with a review of the literature and another warning. This in turn is buried.

In this paper I shall endeaver to show how we have all of our past experience at instant command for review *before* we do an endoscopy on a similar case.

When a case comes to the Bronchoscopic Clinic we get out records of previous cases of the same kind for study. We note the difficulties encountered and how they were solved. We are thus forewarned and forearmed. We rehearse the technic used and in some cases improvements in technic are developed by study of the problem on the rubber tube, cadaver and dog; and in any case we have our previous observations by which to profit.

For instant availability we have tabulated the cases and this has usually obviated the necessity of going over cumbersome, voluminous records, which, however, are also available if needed for supplementary study. When a peanut case comes in it requires 20 minutes to review our difficulties in the preceeding 80 cases of peanut kernels. We colloquialize the tables as "canned experience."

Thinking these tables might be equally useful to other endoscopists for ready reference, covering as they do practically every class of foreign body, they are here presented for publication. It is confidently expected that by serving as a starting point for other endoscopists there will be a continued progress in technic. If similarly arranged tables are made out by other endoscopists, we shall be glad to exchange with them in order to profit by their experiences as well as our own.

*This series includes cases from No. Fbdy. 631 to No. Fbdy. 1155.

System of Recording. Because of the fundamental importance of establishing the status of the new field of work, endoscopy, it was deemed best to exclude all cases in which no endoscopy was done. Data on the excluded cases have been collected and will be published separately. When a foreign body case arrived at the Clinic it was not assigned a number until an endoscopic precedure of some kind was done. One instance of the usefulness of the here excluded non-endoscopic data may be cited. Of 18 cases of fishbones in the upper food passages, 14 were found in the crypts of the tonsils. Hence in any patient coming in complaining of feeling a fishbone in the throat, even though referred, as it often is, to a point low in the neck, the tonsils are searched very carefully.

The following tables include the endoscopic foreign body cases at the Bronchoscopic Clinic since the two previously published tabular reports*, which gave the cases up to their respective dates.

In using these tables as a guide to work on similar cases the following points should be borne in mind:

1. The age of the patient is of the utmost importance in every phase of endoscopy, and should always be taken into consideration.

2. The duration of an endoscopy is recorded in our work in the operating room for two reasons. (a) Prolonged endoscopies in children under two years of age are dangerous. (b) Having a stop-watch running keeps us ever mindful, in preparing for, as well as during endoscopy, that time-wasting must be eliminated. We want all the time available devoted to work with the eye at the tube. The inclusion of recorded time in these published tables, however, is chiefly to serve as an index of the difficulty we encountered and as a criterion of the efficiency or inefficiency of the particular method used in each instance.

3. The size of tube used will serve as a useful guide for selection of a suitable tube for similar cases, bearing in mind, the age of the patient and the location of the foreign body in the tracheo-bronchial tree. The deeper the foreign body the smaller the diameter and the greater the length of the tube required to reach it.

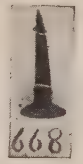
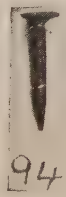
4. The "Problem," "Forceps" and "Point of Seizure" taken together will serve as a forewarning of what may be expected in a similar case and will serve as a guide for practice on the rubber-tube manikin before undertaking a similar case. The age of the patient as bearing on the size of the invaded bronchus is a fundamental

* Peroral Endoscopy and Laryngeal Surgery, Text-book, 1914; and Mutter Lecture, Surgery, Gynecology and Obstetrics, March, 1918; also Proceedings College of Physicians of Philadelphia, 1917.

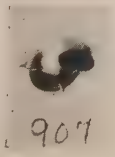
consideration in simulating a problem with a rubber tube of corresponding size.

5. The pathology noted will serve as a forewarning of difficulties likely to be added by length of sojourn, though in many cases the pathology was due to the instrumentation of our predecessors, in the respective cases. As we could not always distinguish with certainty the instrumental trauma of our predecessors from the trauma inflicted by the foreign body itself, we deemed it best to omit mention even of the obviously instrumental trauma inflicted by our predecessors. This trauma, along with the resultant pathology, enormously increased our difficulties and in some instances added to our mortality. In about 40 per cent of the cases here tabulated removal had been attempted before the patients were sent to us. All mention of this has been omitted. We have recorded in each case our own work only.

Note: The specimens of foreign bodies concerned in the cases the data of which are tabulated in the following pages were conveyed by deed of gift to the College of Physicians of Philadelphia. This institution has placed them in the Mutter Museum under the name of "The Chevalier Jackson Collection." The specimens and additional data are accessible to reputable members of the medical profession, for study, upon application to the Committee of the Mutter Museum, of which Dr. George H. Fetterolf is chairman.

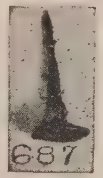
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 668 	22 mos.	Tack	Right inferior lobe bronchus, 87 days	None	5 mm.	Disengaging point	Side-curved	Near point Inward rotation method	Extraction Cure	2 min. 30 sec.	Oral	Point of tack buried up to middle of shank in bronchial wall. Localized bronchitis. Intense subglottic edema.
Fdby. 801	36 yrs.	Tack	Glossoepiglotidean fossa	None					Extraction Cure		Oral	Tack with one quarter of shaft buried in left side of anterior surface of epiglottis.
Fbdy. 941 	14 mos.	Tack	Right bronchus, 9 days	None	5 mm.	Point and shaft of tack in mediastinum. Mediastinal emphysema	Point turned out with side-curved forceps, removed with Tucker	Shaft, after pushing head down	Extraction. Death from mediastinal emphysema	5 min. 56 sec.	Oral	Point of tack found buried in right internal wall.

Fbdy. 774-775	12 yrs.	Two thumb tacks	Right main and stem bronchi respectively, 1 day	None	6 mm.	Two sharp pointed malpresenting tacks	Side-curved	Point of each tack separately	Extraction Cure	1st tack 1 min. 45 sec. 2d tack 3 min. 43 sec.	Oral	First thumb tack encountered in right main bronchus at orifice of upper lobe bronchus. Seized with side-curved forceps and removed. Reinsertion of bronchoscope located second tack with point downward, the entire bronchial lumen being shut off by the head of the tack. Turned edgewise with side-curved forceps and removed. Reaction confined to locality of the foreign body. Left bronchus appeared to be normal as its orifice was noticed in passing the bronchoscope downward into right bronchus.
Fbdy. 708	4 yrs.	Carpet tack	Lower lobe of right lung, 39 days	None	5 mm.	Fbdy. buried in granulations	Side-curved	Shaft, inward rotation method	Extraction Cure	35 min. 10 sec.	Oral	Right bronchus swollen almost shut. Bifurcation 4 mm. thick. Foreign body deep in lower lobe of lung buried in granulations, nothing resembling bronchial wall surrounding it. Pathology not due to foreign body.
Fbdy. 728	2 yrs.	Carpet tack	Left main bronchus 3 months 22 days	None	5 mm.	Buried point. Pathology from 3 months' sojourn	Side-curved	Shaft, inward rotation method	Extraction Cure	2 min. 45 sec.	Oral	Point buried in median wall slightly above the transverse lateral axis. Tack pushed downward, rotated and removed. Suppuration below tack.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 859	3 yrs.	Carpet tack	Left main bronchus 7 days	None	5 mm	None	Side-curved	Shaft	Extraction Cure	4 min. 45 sec.	Oral	Head of tack in left main bronchus. Point of tack projecting above carina and across the orifice of the right main bronchus, point sticking in right wall of trachea at the upper edge of the orifice of the right main bronchus.
Fbdy. 974	6 yrs.	Carpet tack	Left lower lobe bronchus, 5 mos. in lung tissue near diaphragm, 5 days	None	5 mm.	Fbdy. in lung tissue	Side-curved	Point	Extraction Cure	11 min. 10 sec.	Oral	Large quantity of pus coming up from left lung; removed by sponge pumping. Tack found at bottom of left lung almost parallel to diaphragm.
Fbdy. 907 	2 yrs.	Bent carpet tack	Right middle lobe bronchus, 13 days	None	5 mm.	Acute edematous stenosis	Side-curved	Bent shaft	Extraction Cure	5 min. 45 sec.	Oral	Middle lobe bronchial orifice swollen shut and exuding pus and bubbles of gas or air.

Fbdy. 644	12 yrs.	Brass headed tack	Right lower lobe bronchus, 37 days	None	6 mm.	Shaft buried up to 3 mm. of head	Side-curved	Shaft (Inward rotation method)	Extraction Cure	3 min. 25 sec.	Oral	Localized bronchitis. Mucosal trauma not due to foreign body.
Fbdy. 676	3½ yrs.	Brass headed tack	Right bronchus, 13 days	None	5 mm.	Disengaging point buried in mucosa up to head	Side-curved	Near point (Inward rotation method)	Extraction Cure	33 min. 29 sec.	Oral	Very severe laryngotracheo-bronchitis. Exudate on subglottic tissue; not due to foreign body.
Fbdy. 677	4 yrs.	Brass headed tack	In mediastinum below bifurcation 3 mos. 2 days	None	5 mm.	Fbdy. in mediastinum. Suppuration, compressive stenosis)	Side-curved	Shaft near point (Inward rotation method)	Extraction Cure	9 min. 17 sec.	Oral	Left cord paralyzed. Laryngeal walls thickened. Cords thickened Subglottic swelling to a moderate degree. Diffuse tracheobronchitis. Right bronchus less inflamed. Left bronchus swollen almost shut below orifice of upper lobe bronchus. Internal wall flattened 18½ cm. from upper teeth. Very little pus and secretion coming up from below the narrowed point. No. fbdy. in bronchial lumen. Pathology evidently not due to foreign body.

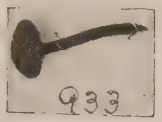
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 687 	10 yrs.	Brass headed tack	Right inferior lobe bronchus, many years	None	6 mm.	Tough granulomata closing bronchus. Point and shaft buried. Pus. Blood. Pathology from many years' sojourn	Side-curved	Point	Extraction Cure	8 min. 19 sec.	Oral	Abscess completely cicatrized and patient perfectly well at end of 6 months.
Fbdy. 694	7 yrs.	Brass headed tack	Left inferior lobe bronchus, 3 mos. 20 days	None	5 mm.	Point buried. Pathology from 4 months' sojourn	Plain	Shaft near point (Inward rotation method)	Extraction Cure	3 min. 14 sec.	Oral	Inferior lobe bronchus swollen shut. Quantities of pus below obstructing head of tack.
Fbdy. 707	4 yrs.	Brass headed tack	Right main bronchus, 3 days	None	5 mm.	Point and half shank buried in median wall of right bronchus	Side-curved	Shaft (Inward rotation method)	Extraction Cure	3 min. 55 sec.	Oral	Posterior wall of trachea collapsed almost touching anterior wall. Right bronchial orifice compressed from behind forward. (Adenopathy? Thymus?)

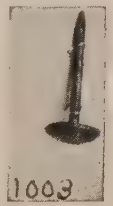
Fbdy. 746	9 yrs.	Brass headed tack	Right lower lobe bronchus, 1 week	None	6 min.	Transfixed and anchored tack	Side-curved	Shaft (Inward rotation method)	Extraction Cure	26 sec.	Oral	Point of tack in orifice of upper lobe bronchus. Head in stem bronchus. Point was brought into the same axis as that of the bronchoscope by means of side-curved forceps. On traction being made the tack seemed quite firmly anchored by the head but was gradually disengaged and the head was drawn against the distal tube-mouth. Pus was not troublesome during bronchoscopy but after removal patient coughed up considerable quantities of pus.
Fbdy. 764	5 yrs.	Brass headed tack	Right lower lobe bronchus, 5 days	None	5 min.	Buried point, transfixed shaft	Side-curved	Shaft (Inward rotation method)	Extraction Cure	3 min. 3 sec.	Oral	Trachea and bronchi quite inflammatory. No sign of trauma from previous bronchoscopy. Tack found in right inferior lobe bronchus with point buried in the wall midway between the anterior and median points. None of the taper of the point visible. Point pushed downward with side-curved forceps, disengaged and brought into bronchoscope.

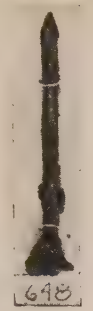
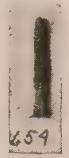
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 917	9 yrs.	Brass headed tack	Left main bronchus, 6 days	None	9 min.	Malpresentation; point upward in left main bronchus; head at orifice of upper lobe bronchus; head of tack too large to be pushed down into either upper or lower lobe bronchus rendering disengagement of point difficult	Tucker	Shaft	Extraction Cure	18 min. 19 sec.	Oral	Swelling of bronchial mucosa and diminution of lumen probably not due to foreign body. Tucker forceps invaluable in solving mechanical problem.

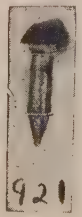
Fbdy. 933 	6 yrs.	Brass headed tack	Right main bronchus, about 7 mos.	None	5 min.	Pathology from perforation into pleural cavity, not spontaneous; pyopneumothorax; esophagopleural fistula, swallowed food coming out through intercostal wound; pulmonary pathology from 7 months' sojourn of tack	Tucker	Shaft	Extraction Cure	9 min. 10 sec Bronchoscopy	Oral	Bronchoscopy: Subglottic and tracheal tissues very much swollen, the subglottic masses nearly meeting in the mid-line; just below bifurcation in the right bronchus there is a mass of granulation tissue with a central opening discharging pus. Further work deemed inadvisable until after healing of esophageal fistula. Esophagoscopy: At about the level where the left bronchus should cross normally, a narrow vertical slit filled with reddish tissue was visible in the esophageal wall: esophagoscope readily passed beyond it into the stomach; rubber feeding tube inserted into stomach through esophagoscope and child thus fed until perforation healed. Perforation from esophagus into pleura not due to foreign body; which was in lung.

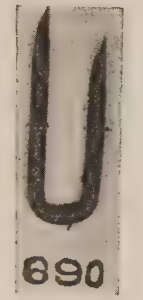
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 985	8 yrs.	Brass headed tack	Right stem bronchus, 72 days	None	5 mm.	Buried point	Tucker	Stem	Extraction Cure	1 min. 47 sec.	Oral	Right stem bronchus below orifice of upper lobe bronchus appeared to be completely filled with granulations; after aspiration of pus, orifice of middle lobe bronchus could be seen on deep inspiration only, disappearing on expiration; stem of tack found buried in granulation tissue; head of tack out of sight in the granulations.
Fbdy. 1003 	5 yrs.	Brass headed tack	Right lower lobe bronchus, 1 month	None	5 mm.	Pathology from bronchial obstruction of 1 month's duration	Side-curved and Tucker	Point and shaft	Extraction Cure	9 min. 52 sec.	Oral	Entire stem bronchus from level of middle lobe bronchus downward filled with granulation tissue and thick pus.

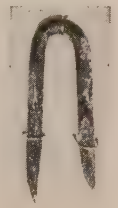
Fbdy. 648 	5 yrs.	Nail	Left main bronchus, 9 mos.	None	5 min.	Pathology from 9 months' sojourn	Side-curved	Point after disembedded	Extraction Cure	2 min. 27 sec.	Oral	Right bronchus normal, below upper lobe bronchus. Left bronchus lined with granulation tissue. Point of nail buried in internal left bronchial wall below carina.
Fbdy. 654 	8 yrs.	Nail	Left bronchus, 1 year, 3 months	None	5 min.	Pathology from 1 year and 3 months' sojourn			Foreign body not found, recovered in stools	21 min. 46 sec.		Localized bronchitis in left inferior lobe bronchus but no tack. Tack evidently coughed up and swallowed after x-ray and before bronchoscopy.
Fbdy. 772 No specimen	2½ yrs.	Nail	Left upper lobe bronchus, 9 mos.	None	5 min.	Upper lobe bronchus compression stenosis from mediastinal abscess		Not seized	Died Cardiac myopathy.	26 min. 54 sec.		Left bronchus at orifice of upper lobe bronchus filled with granulations which bled very freely. Nail not visible anywhere but head could be felt with closed side-curved forceps around the corner in the upper lobe bronchus. Death from cardiac failure 24 days after bronchoscopy. (Myopathy and mediastinal abscess, 9 months' sojourn of foreign body in lung.

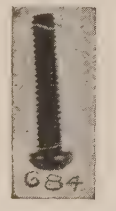
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 913	2 yrs.	Nail	Right main bronchus, 9 days	None	5 mm.	Presentation	Tucker	Shaft (Inward rotation method)	Extraction Cure	1 min. 21 sec.	Oral	First ray showed nail in left main bronchus; second ray, 5 days later showed it to be in right bronchus. (Ray examination should be repeated immediately before endoscopy for verification.)
Fbdy. 921 	3 yrs.	Nail	Left main bronchus, head in left upper lobe bronchus, 10 days	None	5 mm.	Malpresentation	Tucker	Shaft	Extraction Cure	3 min. 3 sec.	Oral	

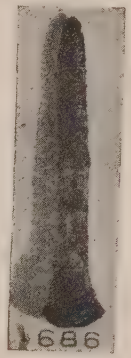
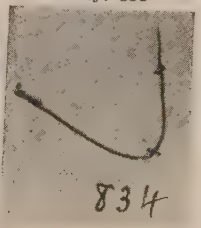
Fbdy. 634	4 yrs.	Staple	Left main bronchus 25 days	None	5 mm.	Double pointed sharp staple points up in small bronchus swollen shut. Points invisible and buried in bronchial wall adjoining pulmonary vein	Rotation	Curved end after turning (Cephalic version, pointed extremities being turned downward, changing to head presentation for withdrawal)	Extraction Cure	18 min. 9 sec.	Oral	Bronchus swollen almost shut, proximally.
Fbdy. 690 	53 yrs.	Staple	Right inferior lobe bronchus, 11 days	Local	8 mm.	None	Side-curved	One point, the other point being protected by lip of tube mouth	Extraction Cure	41 sec.	Oral	Moderate localized bronchitis. Streaks of scratches corresponding to movement of points during respiration and cough. Neither point hidden. No signs of trauma.

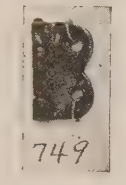
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 825 825	4 yrs.	Staple	Trachea, 5 days	None	Laryngoscope	Points upward, buried in tissue below the glottic narrowing; very rigid wire; very sharp points; danger fbdy. dropping deeper	Rotation	Head	Extraction Cure	1 min. 35 sec.	Oral	Points buried in swollen subglottic tissues. Posterior point readily seized and advanced up out of the larynx, the anterior point being induced to trail downward as the curved portion was brought upward. Curved portion then forced posteriorly against membranous wall of trachea and caused to emerge by pressure exerted in a posterior direction by spatular tip of laryngoscope.
Fbdy. 975  975	7 yrs.	Staple	Right stem bronchus, 26 days	None	5 mm.	Double-pointed tack, points upward; patholgy and trauma	Rotation	Head; version of points at orifice of upper lobe bronchus	Extraction Cure	39 min. 42 sec.	Oral	Found in right stem bronchus just below orifice of upper lobe bronchus. Turned at level of upper lobe bronchus and removed.

Fbdy. 664	48 yrs.	Carpet staple	Left bronchus, 5 months	Local	9 mm.	Points upward; buried in swollen mucosa	Side-curved	Head end after cephalic version (presenting extremities turned downward)	Extraction Cure	2 min. 37 sec.	Oral	Internal point buried in bronchial wall. External point hidden by granulation tissue. Localized bronchitis. Pathology slight considering length of sojourn.
Fbdy. 636	3 yrs.	Screw	Right bronchus, 3 months	None	5 mm.	Fbdy. obscured by pathology from 3 months' sojourn	Side-curved		Extraction Cure	25 min. 10 sec.	Oral	Localized bronchitis, near foreign body; mucosa elsewhere normal.
Fbdy. 684 	3 yrs.	Screw	Right inferior lobe bronchus, 35 days	None	5 mm.	Proximal acute edematous stenosis; granulations; pus; no forceps spaces (35 days' sojourn)	Straight and side-curved	Threaded end	Extraction Cure	2 min. 13 sec.	Oral	Intense subglottic edema. Tracheitis. Mucosa orificeo or left bronchus inflamer. Intense right bronchitis. Orifice of upper lobe bronchus and middle lobe bronchus much swollen. Inferior lobe bronchus swollen almost shut. Screw found below swelling.

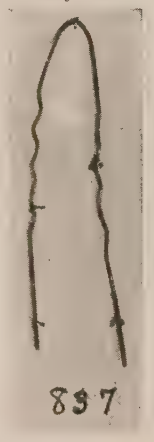
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 686 	11 yrs.	Screw	Right inferior lobe bronchus, 1 yr. 6 mos.	None	6 mm.	Fibrous structure and inflammatory tissue tightly holding fbdy.; head anchored (1½ years' sojourn)	Side-curved	Point	Extraction Cure	12 min. 17 sec.	Oral	Right inferior lobe bronchus closed by swelling and granulation tissue.
Fbdy. 761 No Specimen	32 yrs.	Piece bent wire	Lingual tonsil, 2 hours	None	None	None	Alligator	One point	Extraction Cure		Oral	Bent wire embedded in lingual tonsil in front of epiglottis.
Fbdy. 834 	9 mos.	Bent wire	Hypopharynx, behind cricoid curving through pyriform sinus, 3 days	None	Laryngoscope	None; wire fine, very soft and malicable (annealed	Alligator	Near one end	Extraction Cure	2 min. 40 sec.	Oral	

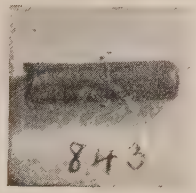
Fbdy. 678	8 yrs.	Cartridge blank	Left bronchus at orifice of upper lobe, 38 days	None	6 mm.	Proximal acute edematous stenosis; granulations; pus; no forceps spaces; 38 days' sojourn	Side-curved	Periphery	Extraction Cure	8 min. 31 sec.	Oral	Granulations bulging into left main bronchus proximally to orifice of upper lobe bronchus.
Fbdy. 659	8 yrs.	Umbrella tip	Bottom of right lower lobe, 5½ or 6 years	None	6 mm.	Connective tissue barrier at bottom of one, among many fistulae; 6 years' sojourn	Plain	Proximal end	Extraction Cure	11 min. 48 sec.	Oral	Pus very foul after connective tissue barrier was removed. Whole lower portion of right lower lobe honeycombed with fistulous passages.
Fbdy. 749 	4 yrs.	Hinge from toy	Right bronchus, 4 days	None	5 mm.	Malpresentation	Rotation	One corner, version method	Extraction Cure	6 min. 27 sec.	Oral	Subglottic tissues intensely swollen.

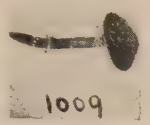
HARDWARE—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 770	6 yrs.	Metal pencil ferrule	Left inferior lobe bronchus, upper edge occluding entirely orifice of upper lobe bronchus. 5 days	None	5 mm.	Tight impaction Hollow fbdy. No external forceps spaces.	Side-curved	By edge, one blade of forceps inside, other outside. Opposite edge covered by lip of tube-mouth during withdrawal to protect tissues	Extraction Cure	5 min. 22 sec.	Oral	Tight impaction, doubtless due to atelectatic condition of that lung consequent upon complete occlusion of the bronchi on left side. Absorption of air led to negative pressure drawing foreign body downward.
Fbdy. 785	3 yrs.	Hook-shaped object	Esophagus partly above partly below cricopharyngeus. 10 days	None	45 cm. esophago-	Sharp double hook. One hook above cricopharyngeus, preventing movement downward, other hook below cricopharyngeus preventing withdrawal upward. Very large object for size of esophagus. Dyspnea.	Side-curved	Lower hook after disembedding	Extraction Cure	9 min. 37 sec.	Oral	Fbdy. covered with food, blood-stained secretions and granulations. Intense dyspnea supervened as soon as it was approached with the esophageal speculum. Localized esophagitis.

Fbdy. 788	28 yrs.	Metal pencil top with eraser attached	Left lower lobe bronchus 1½ yrs.	Local		Fibrous tissue barrier.	Side-curved		Extraction Cure	2 hrs.	Oral	Foreign body not seen. Left inferior lobe bronchus ended in a tightly strictured fistula with strong webs of cicatricial tissue across the lumen. Granulations were removed, the fistula dilated and the bronchoscope gradually insinuated for a distance of 3 cm. from its proximal end. A cavity filled with mushy granulations was found, and in it a small portion of the foreign body was discovered. The foreign body was maniuplated until its proximal end came into presentation and was removed the third time it was grasped
Fbdy. 837 	2 mos.	Hair pin	In hypopharynx and orifice of esophagus about 1 month	None	7 mm.	Both points upward and buried in mucosa	Side curved. (Tucker forceps better, but not then devised)	One point, after other point bent inward	Extraction Cure	1 min. 56 sec.	Oral	Child was rayed on suspicion of enlarged thymus because of stridorous respiration of one month's duration.

HARDWARE—*Continued*

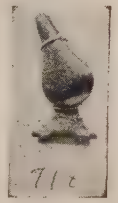
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 843 	6 yrs.	Piece lead pipe	Left upper lobe bronchus, projecting into main bronchus, 4 days	None	6 mm.	Very small forceps spaces	Side-curved	Over outside of presenting end	Extraction Cure	2 min. 28 sec.	Oral	
Fbdy. 930	37 yrs.	Metallic object (nature unknown)	Right lower lobe bronchus, 35 years (about)	Local		Patient moribund from cachexia			Foreign body removed post-mortem	47 min. 59 sec.	Oral	On bronchoscopy fistula found communicating with right inferior lobe bronchus. Bronchoscopy postponed to give very feeble patient rest; death 4 days after bronchoscopy from pulmonary hemorrhage. Autopsy revealed epithelioma (Metaplasia. See report of Weiss and Krusen, Journ. A.M.A., Feb. 18, 1922).
Fbdy. 968	6 yrs.	Paper fastener	Right stem bronchus below orifice of upper lobe bronchus, 8 days, points up	None	5 mm.	Diverging points	Plain	Both points compressed together	Extraction Cure	1 min. 9 sec.	Oral	

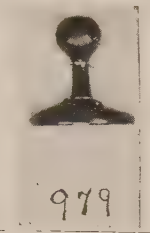
Fbdy. 1009 	3 yrs.	Umbrella headed tack	Left main bronchus 3 days	None	5 mm.	Buried point; Mushroom anchor; swollen mucosa	Tucker	By point	Extraction Cure	4 min. 17 sec	Oral	Bronchus filled above tack with thick pus, looking like exudate. All bronchi seen were very much inflamed.
Fbdy. 1011 No Specimen	2 yrs. 5 mos.	Screw	Left bronchus 1 cm. below bifurcation 10 days	None	5 mm.	Presentation and proper grasping	Tucker	By point	Extraction Cure	2 min. 43 sec.	Oral	
Fbdy. 1041	8 yrs.	Ball bearing ball	Right inf. lobe bronchus below orifice middle lobe bronchus. 16 days	None	7 mm.	Ball tightly impacted	Plain with cupped faces	Poles	Extraction Cure	23 min. 10 sec.	Oral	Mucosa swollen proximally almost closing lumen. Swollen mucosa pressed backward with tube mouth and foreign body seized.
Fbdy. 1054	27 yrs.	Pencil cap	Left lower lobe bronchus. 21 yrs.	Local	7 mm.	Friable foreign body in abscess cavity filled with fibrous tissue, granulations and pus	Plain	Edge	Extraction Cure	33 min. 20 sec. 26 min. 35 sec.	Oral	Right bronchial orifice inflammatory; left bronchus chronically inflamed; mucosa thickened. Just below orifice of left upper lobe bronchus stem bronchus seemed to be completely obliterated. Forceps gradually insinuated through organized tissue. Below narrowing was found a cavity filled with granulation tissue in which foreign body was located encased in capsule of fibrous tissue. Foreign body crumbled at touch of forceps. Large number of fragments removed. One fragment embeded in tissue; not torn loose. Removed at second bronchoscopy.

HARDWARE—*Continued*

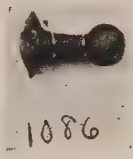
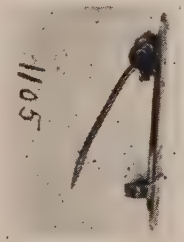
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1056	3 yrs. 8 mos.	Tack	Right stem bronchus. 5 months	None	5 mm.	Buried point; mushroom anchor; pus; bleeding granulations	Tucker	By point	Extraction Cure	4 min. 40 sec.	Oral	Right main bronchus filled with granulations; quantity of pus came up from below as soon as tack was touched.
Fbdy. 1061	4 yrs.	Screw	Right lower lobe bronchus. 5 days	None	5 mm. aspirating	Presentation and proper grasping	Tucker	By point	Extraction Cure	7 min. 22 sec.	Oral	
Fbdy. 1093	3½ yrs	Carpet tack	Right main bronchus. 4 days	None	5 mm.	Buried point; tack transfixed	Tucker	Near head, point trailing	Extraction Cure	2 min. 37 sec.	Oral	Version done at orifice of upper lobe bronchus.
Fbdy. 1095	3 yrs.	Screw	Left bronchus above orifice of left upper lobe. 1 yr. 9 mos.	None	5 mm. aspirating	Proper presentation and grasping; bleeding granulations; profuse flow of pus	Side-curved	Pointed end	Extraction Cure	3 min. 16 sec.	Oral	Left bronchial orifice filled with exuberant bleeding granulations, buried in which the foreign body was found.

Fbdy. 1104 1104	12 yrs.	Nail	Lower portion left upper lobe. 10 years	None	6 mm. aspirating	Location of foreign body in left upper lobe	Plain	Pointed end	Extraction Cure	22 min. 22 sec.	Oral	Nail embedded in pathologic tissue consisting of fistulae, fibrous bands, exuberant granulations in the lower portion of left upper lobe.
Fbdy. 1117 1117	14 yrs	Umbrella headed tack	Right middle lobe bronchus. 2 yrs. 2 mos.	None	6 mm. aspirating	Foreign body bedded in granulations below bronchial stricture	Tucker	Near point, after dilatation of stricture	Extraction Cure	13 min. 26 sec.	Oral	Stem bronchus narrowed below the middle lobe bronchus; below the narrowing the bronchus widened into a bronchiectatic cavity deep down in which was a mass of granulation tissue in which the tack was buried.
Fbdy. 1148 1148	18 yrs.	Umbrella headed tack	Right main bronchus. 9 yrs.	None	7 mm.	Corroded friable tack embedded in granulations below tightly strictured bronchus	Tucker	Point after dilating stricture; head remained and was seized flatwise	Extraction Cure	7 min. 50 sec.	Oral	Right bronchial orifice very much narrowed, lumen of orifice being about 3 mm. in diameter with a mass of granulation tissue below hiding the lumen from view. After dilatition point of tack found in contact with anterior wall just below narrowest part of stricture. Stem of tack crumbled under forceps and was removed in fragments; head then removed.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 718 	6 yrs.	Portion of collar button	Left main bronchus. 1 yr.	None	5 mm.	None	Side-curved	Presenting end	Extraction Cure	3 min. 13 sec.	Oral	Nodule apparently granulomatous hanging on proximal side of foreign body.
Fbdy. 748	21 yrs.	Open bar pin	Left lower lobe bronchus. 18 yrs	Local	7 mm.	Fibrous stenosis	Side-curved	Point	Extraction Cure	9 min. 14 sec.	Oral	Opening of abscess cavity leading off posteriorly from inferior lobe bronchus was discovered with the aid of Dr. Manges' fluoroscopic guidance. After sponging, the lip of the bronchoscope could be inserted in this orifice. The point was rotated with forceps until the point was protected by the lip of the bronchoscope. The point then slid along the light carrier canal permitting withdrawal of the pin through bronchoscope. Latter withdrawn afterward. Pin very much corroded and broke in the hand after removal.

Fbdy. 954	9 mos	Collar button	Esophagus below crico-pharyngeus. 9 days	None	7 mm.	Malpresentation	Alligator cupped	Post, after version	Extraction Cure,	4 min. 10 sec.	Oral	Collar button jammed below cricopharyngeus and wedged into the posterior wall of the trachea below the cricoid; tracheal lumen noted through laryngoscope to be bulged forward, especially on its right posterior quadrant. Mass of cotton about 3 cm. long and 5 mm. in diameter removed from above the collar button, revealing an ulceration in both anterior and posterior walls of esophagus. Post presented by version and grasped with alligator forceps and removed.
Fbdy. 979 	6 yrs.	Collar button	Esophagus just below crico-pharyngeus. 5 days	None	7 mm.	Malpresentation	Side-curved	Post, after version	Extraction Cure	5 min. 20 sec	Oral	Collar button lying in slit in posterior esophageal wall.
Fbdy. 1051	13 mos.	Ring	Esophagus 11 mos. 3 weeks	None	5 mm.	Presentation; thymic compression; inflammatory infiltration	Mosquito	Presenting part	Extraction Cure	20 min. 56 sec.	Oral	Both trachae and esophagus seem to be compressed by some mass in upper mediastinum which threatens asphyxia every time the esophagoscope is introduced to the vicinity of the foreign body. Foreign body not visible. Esophageal lumen entirely closed by masses coming in from all sides and covered with granulation tissue. On displacing these folds the small portion of the upper edge of ring was visible.

JEWELRY—*Continued*

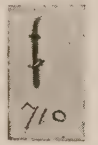
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
1086 	7 yrs.	Collar button	Right lower lobe bronchus. 8 mo.	None	6 mm.	Moribund patient with one lung completely collapsed and ¼ of other lung out of function from suppuration	Plain	Post	Extraction Death	4 min. 17 sec.	Oral	Patient admitted with left pyopneumothorax. At bronchoscopy collar button found in an area of ruptured bronchus deep down in right lower lobe. Patient had one lung collapsed and at least ¼ of the other lung out of service, leaving only ¾ of one lung with which to breathe. Patient kept alive on table by oxygen through bronchoscope. Intercostal drainage, left side 5 days after bronchoscopy. Death one week later.
1105 	4 yrs.	Beauty pin	Left bronchus 1 cm. below bifurcation. 23 days.	None	5 mm.	Open bar pin	Side-curved	By pointed branch	Extraction Cure	12 min. 37 sec.	Oral	Point-protected method of removal.

Fbdy. 635

Fbdy. 650

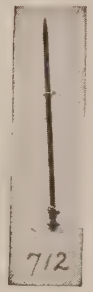
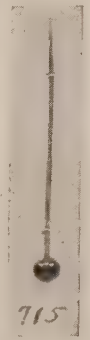
Fbdy. 662

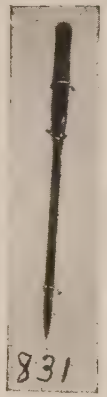
Fbdy. 710



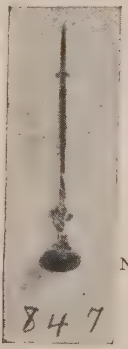
19 yrs.	Shawl pin	Right inferior lobe bronchus. 7 days	Local	7 mm.	Point buried in bronchial wall	Side-curve	Near point Inward rotation	Extraction Cure	14 min. 51 sec	Oral	No sign of trauma or slightest injury from previous bronchoscopy.
3 yrs.	Shawl pin	Left inferior lobe bronchus. 21 hours	None	5 mm.	Disengaging point		Near point inward rotation	Extraction Cure	1 min. 17 sec	Oral	
20 yrs.	Pin	Pharynx. 1 day	None	Laryngoscope	None		Near point,	Extraction Cure	48 sec.	Oral	
40 yrs.	Pin	Middle lobe bronchus. 5 days	Local	7 mm.	Transfixed crosswise						Died of hemorrhage.

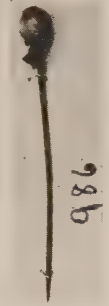
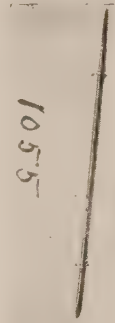
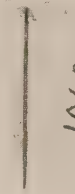
PINS AND NEEDLES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 712 	50 yrs.	Pin	Esophagus level 7th cervical vertebra. 4 days	None	9 mm.	Pin buried up to head in anterior esophageal wall		Point	Extraction Cure	3 min. 17 sec.	Oral	
Fbdy. 715 	31 yrs.	Shawl pin	Left upper lobe bronchus. 16 days	Local	7 mm.	Pin around corner in anterior branch of left upper bronchus. Point buried		Point inward rotation	Extraction Cure	12 min. 4 sec.	Oral	
Fbdy. 726	41 yrs.	Glass headed shawl pin	Inferior lobe of right lung	Local	7 mm.	Disengaging point from cicatricial tissue below the overhanging of stricture	Side-curved and plain	Near point inward rotation	Extraction Cure	3 min. 25 sec.	Oral	Right bronchus ulcerated, narrowing down into a funnel-shaped stricture. Pin surrounded by brownish material which crushed under forceps. Stricture was so narrow that the head engaged, but it was pulled through without great difficulty.
Fbdy. 733	20 yrs.	Pin (Common)	Right lower lobe bronchus. 3 days	Local	5 mm.	Finding pin in a minute branch bronchus too small for bronchoscope to enter	Plain	Point	Extraction Cure	35 min.	Oral	No abnormality visible anywhere. Fluoroscopic assistance of Dr. Manges required for identification of invaded bronchus.

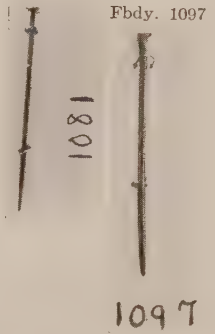
Fbdy. 741	2 yrs.	Pin (common)	Left lower lobe bronchus. 9 days	None	5 mm.	Small pin in tiny branch bronchus	Plain	Point	Extraction Cure	30 min. 21 sec.	Oral	Point of pin nowhere visible at level of giving off of left upper lobe bronchus. Three posterior branch bronchi were visible just below this special subdivision. Inspection afforded no evidence as to which bronchus was invaded. With fluoroscopic assistance of Dr. Manges the first one of these posterior branches was found to be the invaded one.
Fbdy. 798	15 yrs.	Pin (common)	Extreme lower end of right lower lobe bronchus. 1 month	Local	5 mm.	Extreme depth of pin in a minute bronchus, leading from a small bronchus "around the corner"	Side-curved	Point	Extraction Cure	17 min. 34 sec.	Oral	Pin found in terminal branch extending first toward median line, then outward in the extreme lower end of lower lobe lung. The occupied bronchus was swollen shut but dilated easily when forceps were inserted.
 Fbdy. 831	2½ yrs.	Sewing machine needle	Right lower lobe bronchus. 1 month	None	5 mm.	None	Side-curved	Point	Extraction Cure	5 min.	Oral	All bronchi normal.
Fbdy. 835	2 yrs. 9 mos.	Pin (common)	Left lower lobe bronchus. 18 days	None	5 mm.	Finding the invaded bronchus	Side-curved	Point	Extraction Cure	8 min. 35 sec.	Oral	Pus coming up from left stem bronchus below orifice of upper lobe bronchus. Pin in second posterior branch of inferior lobe stem bronchus, that is, the second branch coming off below orifice of upper lobe bronchus.

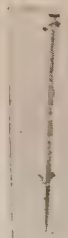
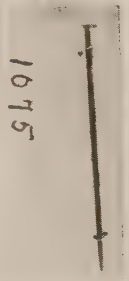
PINS AND NEEDLES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 847 	33 yrs.	Shawl pin	Right main bronchus. One week	Local	7 mm.	Point of pin at orifice of middle lobe bronchus with point in median wall of stem bronchus buried about 1 cm.	Side-curved	Point	Extraction Cure	33 min. 27 sec. 2 min. 5 sec.	Oral	
Fbdy. 851 No Specimen	14 mos.	Pin (common)	Left lower lobe, in lung tissue, about 5 months	None		Extreme depth of pin in lung of so small a child, pin in lung tissue, not in a bronchus			Pin coughed up following two attempts at removal during which pin was moved to a higher level	21 min. 5 sec.		Subglottic tissue found swollen. Pin at level of diaphragm. Tissue barrier quite firm. At second bronchoscopy pointed end of pin found buried in tissues to a distance of about 6 mm.
Fbdy. 860	23 yrs.	T-shaped pin (paper fastener)	Head in right bronchus, point sticking in left tracheal wall just above carina, 5 days	Local		Point buried. Transfixed	Side-curved	Near point. Inward rotation	Extraction Cure	45 sec.	Oral	Mass of thick, tough, grey secretion covering the portion of pin that had buried itself in tracheal mucosa.
Fbdy. 869	14 yrs.	Pin (common)	Right lower lobe bronchus, 33 days	None	5 mm.		Side-curved	Near point. Inward rotation	Extraction Cure	23 min. 17 sec.	Oral	Pin found in a tiny branch bronchus, orifice of which was swollen shut.

Fbdy. 912 912	12 yrs.	Pin (common)	Point in left pyriform sinus; head in right pyriform sinus, 1 day	None	Esophageal speculum	Transfixed	Mathieu	Near point. Inward rotation	Extraction Cure	2 min. 52 sec.	Oral	
Fbdy. 986  986	10 yrs.	Shawl pin	Left bronchus, 48 days	None	5 mm.	Pin in small peripheral bronchus of a child	Tucker	Point	Extraction Cure	11 min. 28 sec.	Oral	Pin found in posterior vertical branch of the largest posterior subdivision of the stem bronchus in the left lower lobe; shaft of pin brought parallel to axis of bronchoscope and withdrawn into the bronchoscope to protect the point; pin forceps and bronchoscope all brought out together with the pin inside of the bronchoscope.
Fbdy. 1055  1055	45 yrs.	Needle	Pharynx, point upward, 6 days	Local	Laryngoscope	Presentation and prevention of escape downward	Papilloma	Uppermost end	Extraction Cure	1 min. 30 sec.	Oral	Needle in left pyriform sinus, point upward embedded in mucosa of tongue, shaft extending downward, the eye end lodging in cricopharyngeal fold. Small area of submucous hemorrhage around the embedded point on base of tongue.
Fbdy. 1062  1062	41 yrs.	Pin (common)	Esophagus below crico-pharyngeal folds, point downward, 3 hours	None	Forbes speculum	Presentation and avoidance puncture by overriding	Tucker	Shaft below head	Extraction Cure	36 sec.	Oral	

PINS AND NEEDLES—*Continued*

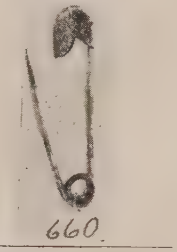
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1081 Fbdy. 1097  	25 yrs.	Pin (common)	Pharynx, about 2 hours	None			Angular nasal		Extraction Cure		Oral	
	12 yrs.	Pin (common)	Hypopharynx, point downward, 4 days	None	Hypopharyngoscope	Presentation, avoidance of overriding and loss downward	Alligator (Mosher's)	Shaft below head	Extraction Cure		Oral	Pin lying across larynx, point embedded in right pharyngeal wall, posteriorly, the head end directed toward base of epiglottis, left side.
Fbdy. 1103 	17 yrs.	Pin (common)	Right lower lobe bronchus, point upward, 28 days	Local	6 mm.	Finding pin located point presenting endwise in tiny anterior branch of inf. lobe bronchus in periphery of lung	Plain	Pointed end	Extraction Cure	13 min. 35 sec.	Oral	

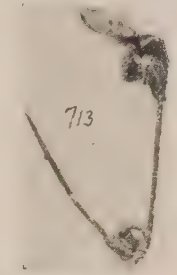
Fbdy. 1151  Fbdy. 1075 	18 yrs.	Pin (common)	Larynx, 13 hours	None	Laryn-goscope	Prevention of loss downward	Tucker	Shaft near pointed end	Extraction Cure	35 sec.	Oral	Pin found with head in right ventricle near anterior commissure, point embedded in posterior surface of epiglottis. Patient in Jackson position for removal.
	19 yrs.	Shawl pin	Left main bronchus	Local	7 mm.	Long, pointed fbdy.	Tucker	Near point	Extraction Cure	1 min. 19 sec.	Oral	

SAFETY PINS

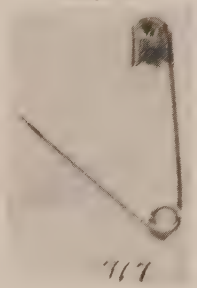
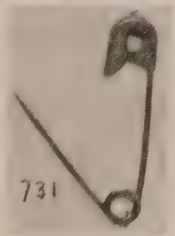
Fbdy. 651	11 wks.	Safety-pin open	Upper esophagus level of larynx, 1 day	None		None	Straight	Spring end	Extraction Cure		Oral	

SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 660  660	15 mos.	Safety-pin open	Right inferior lobe bronchus, 10 days	None	4 mm.	Open safety pin in a small bronchus point up	Side-curved	Pointed branch	Extraction Cure	7 min. 51 sec.	Oral	Considerable degree of laryngeal perichondritis and broncho-pneumonia, localized.
Fbdy. 670 670	6 yrs.	Safety-pin open	Trachea, 4 days	None	5 mm.	Point up	Side-curved	Pointed branch	Extraction Cure	7 min.	Oral	
Fbdy. 695 695	12 mos.	Safety-pin open; point down	In stomach two months. Regurgitated into esophagus	None	7 mm.	Prevention of overriding, point being downward and having already perforated	Side-curved	Spring end				

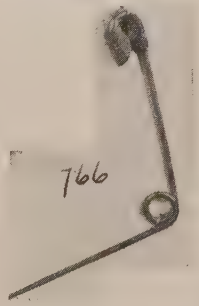
Fbdy. 697	32 yrs.	Safety-pin open	Left bronchus, 15 days	Local	7 mm.	Point upward	Side-curved	Pointed branch	Extraction Cure	4 min. 49 sec.	Oral	Localized bronchitis, left; left bronchial orifice not stenosed.
Fbdy. 701	9 mos.	Safety-pin open	Trachea 1 day	None	5 mm.	None	Side-curved	Pointed branch	Extraction Cure	7 sec.	Oral	Acute laryngotracheitis, safety-pin in trachea immediately subglottic.
Fbdy. 713 	8 mos.	Safety-pin open	Esophagus at hiatus esophageus 1 day	None	7 mm.	Open safety-pin jammed in cardia			Pin pushed into stomach. Recovered in stools	12 min. 15 sec.		

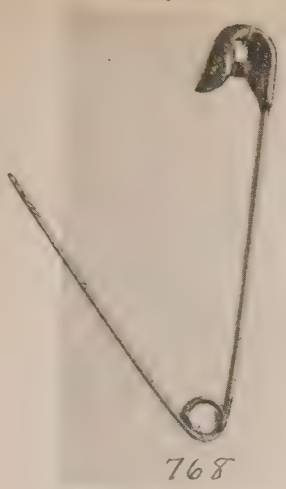
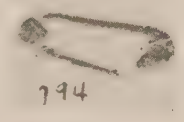
SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 717 	7 mos.	Safety pin open	Overhanging larynx. Point up. 1 day.	None	Direct laryngoscope	Open, point up. Embedded up to spring		Pointed branch	Extraction Cure	1 min. 25 sec.	Oral	
Fbdy. 731 	19 mos.	Safety pin open	Esophagus, 3 days	None	Esophageal speculum	Point up	Alligator	By keeper. Point sheathed in tube mouth	Extraction Cure	16 sec.	Oral	Safety pin below cricopharyngeus

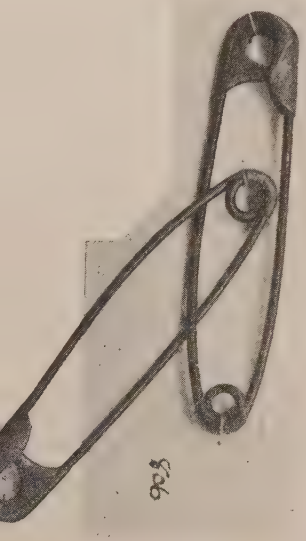
Fbdy. 734	18 mos.	Safety-pin closed	Trachea 8 days	None	5 mm.	None		Spring end	Extraction Cure	1 min. 10 sec.	Oral	Marked glottic and subglottic swelling, intense laryngotracheitis.
Fbdy. 742	7 mos.	Two safety-pins (closed and linked together)	Trachea, 8 days	None	5 mm.	Extremely large size of foreign body and extremely small size of air passages which seemed small even for a 7 mos. baby		Keeper end	Extraction Cure	2 min. 17 sec.	Oral	The upper pin seized with forceps and the pins withdrawn linked together "in a chain."
Fbdy. 747	3 mos.	Safety-pin open	Esophagus, 2 days	None	Laryngoscope	Pointed branch buried in left esophageal wall up to spring.		Keeper end	Extraction Cure	45 sec.	Oral	Keeper end of pin about 4 cm. below cricopharyngeus. Pin disimpacted by pushing down and pin then rotated to lip of laryngoscope.

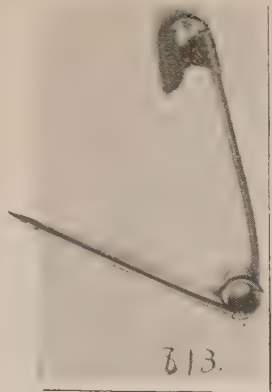
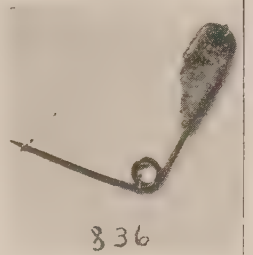
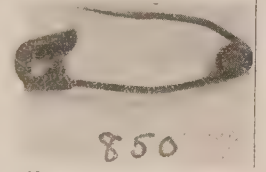
SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 758	20 yrs.	Safety-pin open	Left upper lobe bronchus, 6 days	Local	7 mm.	Point upward	Side-curved	Point	Extraction Cure	2 min. 4 sec.	Oral	Pin found in left lung, spring end in upper lobe bronchus, the pin crosswise. Point of pin drawn into bronchoscope and withdrawn through bronchoscope. Pin was bent by the point catching in side outlet at proximal end of bronchoscope.
Fbdy. 766 	9 mos.	Safety-pin open	Esophagus lower end just above hiatus, 8 days	None		Pointed branch visible only for a distance of about 5 mm. from spring, balance of pointed branch being buried in the tissues. Compression stenosis from mediastinal emphsema. Removed by endogastric straightening against tube-mouth.		Keeper end	Extraction	3 min. 16 sec.	Oral	Death 7 days following removal, from bronchopneumonia and mediastinitis.

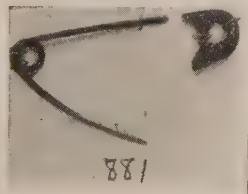
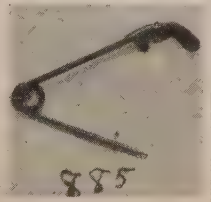
Fbdy. 768 	15 yrs.	Safety-pin open	Right main bronchus, 3 weeks	None		Point up	Side-curved	Spring end	Extraction Cure	5 min. 3 sec.	Oral	Intense tracheobronchitis. Mound of granulation tissue springing from internal wall of right bronchus Ring of pin found just below bifurcation. Keeper end not anchored. Spring too large to draw into any bronchoscope that could be safely introduced. Brought up very carefully. Did not meet with any resistance.
Fbdy. 786	4 yrs.	Safety-pin open	Larynx, point up, 3 days	None	Laryngoscope	Point up	Alligator	By keeper	Extraction Cure	25 sec.	Oral	Keeper of safety-pin hanging on the vocal cords, obscured by the overhang of the ventricular bands except on inspiration. Pin seized during inspiration and withdrawn, point sheathed with the laryngoscope.
Fbdy. 794 	18 yrs.	Safety-pin open	Right lower lobe bronchus. Point up. 1 yr. 10 mos.	Local	7 mm.	Corroded pin, open	Side-curved	Pointed branch	Extraction Cure	1 min. 35 sec.	Oral	Keeper end of pin found at orifice of abscess cavity. Foreign body rotated and removed in two pieces with side-curved forceps.

SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 806 	6 mos.	Two safety-pins (closed and linked together)	Stomach, 4 weeks	None	7 mm.	Presenting of proper part for safe witndrawal.		One of the keepers	Extraction Cure	26 min.	Oral	Pins were wrapped in folds of the stomach wall, and both walls and pins were in constant motion. There were many opportunities to seize the pins during the course of the gastroscopy, but each time it was an unfavorable portion. I had decided upon one of the keepers as the most favorable part of the double foreign body to seize and it required the full time to get the pins turned so that one of them would present the keeper end for traction. Drawing gently on this one the second pin formed a second link to the chain during withdrawal. Great care was required in getting the keeper end of the second pin through the hiatus and later past the cricoid.

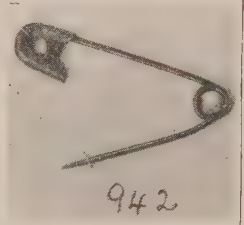
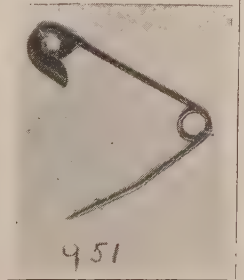
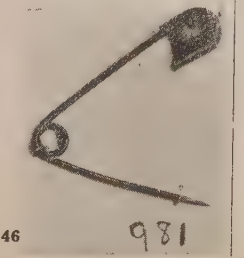
Fbdy. 813  	2 yrs.	Safety-pin open	Esophagus below cricopharyngeus point up, about 8 hours	None	7 mm.	Pointed branch of pin buried up to the spring	Side-curved	Pointed branch	Extraction Cure	1 min.	Oral	
Fbdy. 836  	7 mos.	Safety-pin open	Esophagus just below cricopharyngeus, 11 days	None	5 mm.	Open, point up. Covered with wool	Side-curved	Pointed branch	Extraction Cure	30 sec.	Oral	First examination showed large laceration on right posterior wall just above cricopharyngeal fold. Removal postponed until laceration had healed.
Fbdy. 850  	34 yrs.	Safety-pin open, point downward	Esophagus, 12 days	None	9 mm.	Entire pin except keeper buried in mucosa	Side-curved	Pointed branch	Extraction Cure	3 min. 2 sec.	Oral	

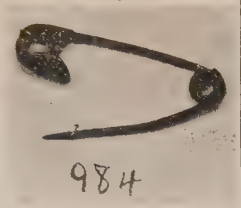
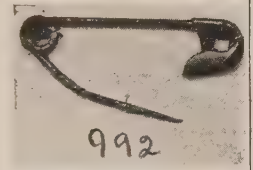
SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 862	1 yr.	Safety-pin open, point downward	Esophagus just above diaphragm, 4 days	None	7 mm	Open, point up.	Side-curved	Spring end	Extraction Cure	2 min. 53 sec.	Oral	Spring end of pin encountered just above the diaphragm and the pointed branch outward to the left buried out of sight from a point about 1 cm. distant from the spring; keeper out of sight below hiatus esophageus. Pin closed by drawing into tube; tube-mouth protecting the esophagus from trauma by the sharp, hook-shaped keeper end of the pin.
Fbdy. 881 	2 yrs.	Open safety-pin	Larynx, point downward, 8 mos.	None	Laryngoscope	None	Alligator	Spring	Extraction	3 min. 30 sec.	Oral	Child referred for treatment of laryngeal stenosis for which he was wearing tracheotomy tube. Routine ray examination showed foreign body in larynx. On direct laryngoscopy, pin found deeply impacted in granulation tissue which completely filled larynx. Tracheotomy had been done 8 months previously for supposed diphtheria.
Fbdy. 885 	9 mos.	Open safety-pin	Nasopharynx, 2 days	None	Laryngoscope	None.	Alligator	Spring end	Extraction Cure	40 sec.	Oral	Palate lifted with pillar retractor.

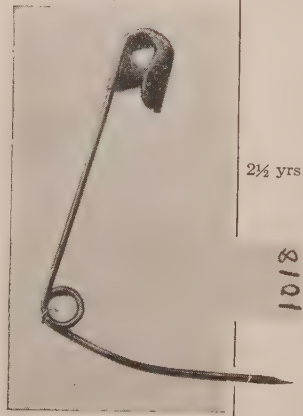
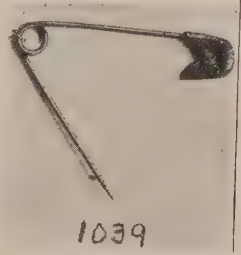
Fbdy. 889	17 mos.	Open safety-pin	Esophagus 2 cm. below crico-pharyngeus, 2 days, point downward	None		Point up	Alligator	Pointed branch. Point-sheathed method.	Extraction Cure	1 min. 15 sec.	Oral	
Fbdy. 899	18 mos.	Open safety-pin	Trachea 7 months, point upward	None		Point up	Alligator	Near point	Extraction Cure	1 min.	Oral	Pin not visible except during inspiration; subglottic tissues swollen until they almost met in the median line below the cords. Croupiness evidently due not to the presence of pin between the cords, but to the swelling of the cords and subcordal tissues.
Fbdy. 929	15 mos.	Open safety-pin	Esophagus just above crossing of left bronchus, point up, 6 days	None	Esoph-ageal spec-ulum	Pointed branch out to right and buried for half its length in the right esophageal wall at an angle that indicated perfora-tion	Alligator	Keeper end pointed branch pushed down and rotated into spatular end of esopha-geal spec-ulum	Extraction Cure	1 min. 40 sec.	Oral	

SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 942 	9 mos.	Open safety-pin	Esophagus just above hiatus, 13 days	None	7 mm.	Point up. Pin pushed into stomach, straightened and brought out through tube.		Endogastric straightening	Extraction Death	6 min. 31 sec.	Oral	Death 10 days following removal from septic pneumonia.
Fbdy. 951 	6 mos.	Open safety-pin	Esophagus 4 cm. below cricopharyngeus, 5 days. Point up	None		Point up. Small baby.	Side-curved	Pointed branch	Extraction Cure	2 min. 46 sec.	Oral	
Fbdy. 981 	2 mos.	Safety-pin open	Esophagus below crossing, left bronchus, 2 days	None	5 mm.	Point up. Removed by endogastric version.	Pushed into stomach with side-curved removed with rotation forceps		Extraction Cure	6 min. 35 sec.	Oral	Removed by endogastric version.

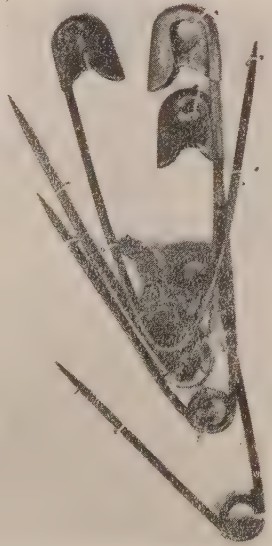
Fbdy. 984 	10 mos.	Safety-pin open	Hypopharynx, 2 days. Above cricopharyngeus	None	7 mm.	Pointed branch buried. Point up	Alligator	Point after disembedding	Extraction Cure	2 min. 33 sec.	Oral	It is very rarely that a safety pin lodges as this one did, above the cricopharyngeal fold.
Fbdy. 990	8½mos.	Safety-pin open	Hypopharynx, above cricopharyngeus, 2 days	None	7 mm.	Point up		Spring end	Extraction Cure	15 sec.	Oral	Lodgment above cricopharyngeus is very rare.
Fbdy. 992 	10 yrs.	Safety-pin open	Larynx, 22 days	None	Laryngoscope	Pointed branch buried in cricoid cartilage posteriorly. Point up		Spring end	Extraction Cure	3 min. 52 sec.	Oral	
Fbdy. 1006	5 yrs.	Open safety-pin	Larynx, point upward, 3 months	None	Laryngoscope	Prevention of loss downward; avoidance of trauma	Tucker	Pointed branch	Extraction Cure	39 sec.	Oral	Larynx swollen. Odor putrid. Pin found in sagittal plane. Point sheathed method of removal.

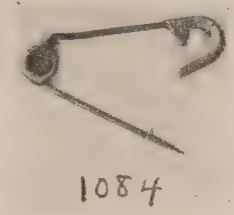
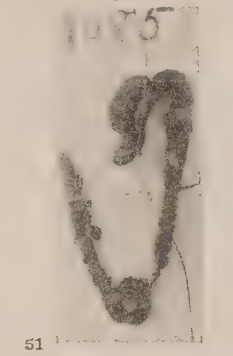
SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1018 	2½ yrs.	Open safety-pin	Keeper in right pyriform sinus, spring end in esophagus below cricopharyngeus, point up, 3 days	None	Laryngoscope	Point embedded in anterior wall of left pyriform sinus. Wide spread of pin	Rotation	Keeper	Extraction Cure	2 min. 35 sec.	Oral	Pin located in pharynx. Dropped to lower level during direct examination whence removed 2 days later.
Fbdy. 1039 	17 mos.	Open safety-pin	Esophagus above aorta, 1 day	None	Esophagoscope and laryngoscope	Open safety pin, point upward	Side-curved and laryngeal grasping	Pointed branch	Extraction Cure	5 min. 45 sec.	Oral	Point-sheathed method of removal.

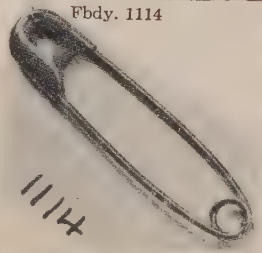
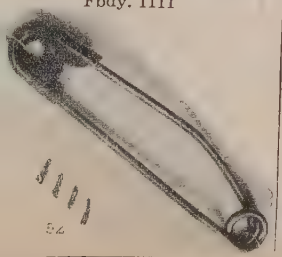
Fbdy. 1040	3 yrs.	Open safety-pin	Esophagus, buried in cricopharyngeal fold, 2 days	None	7 mm.	Open safety pin, point upward	Tucker	Pointed branch	Extraction Cure	5 min. 40 sec.	Oral	Point-sheathed method of removal.
Fbdy. 1058	6 yrs.	Open safety-pin	Right bronchus, 10 days	None	6 mm.	Open safety pin	Rotation	Pointed branch near ring	Extraction Cure	1 min. 38 sec.	Oral	Removal after version.
Fbdy. 1066	8 mos.	Open safety-pin	Esophagus below crossing of left bronchus, 1 day	None	6 mm.	Point embedded up to spring end in left esophageal wall	Rotation and Tucker	Pointed branch	Extraction Cure	0 min. 33 sec.	Oral	Withdrawn with point in tube and keeper outside. Point-sheathed method.

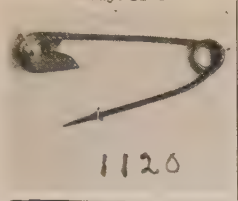
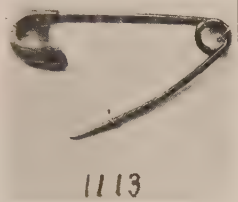
SAFETY PINS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1071 	9 mos.	Four open safety pins	Esophagus, points up, over 5 weeks	None	6 mm.	Four open, upward pointed, interlocked safety-pins	Tucker; Arrowsmith pin closer	One by point; one by spring end after sheathing point.	Two pins removed esophagoscopically; two recovered in stools after disentanglement and gastric emplacement	36 min. 38 sec. 24 min. 19 min. 32 sec.	Two pins orally	Pins disentangled by detaching two lowermost and placing them in the stomach; two uppermost (larger and stiffer) removed perorally by point sheathed method with Tucker forceps. Arrowsmith closer used to approximate keeper and pointed branches.
Fbdy. 1073	10 mos.	Open safety-pin	Right inferior lobe bronchus; point up, 28 days	None	5 mm.	Open safety-pin point up in infant	Side-curved	By point	Extraction Cure	2 min. 49 sec.	Oral	Pin removed by straightening against tube mouth

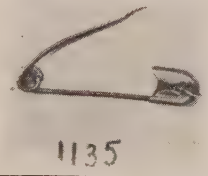
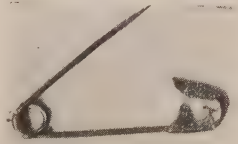
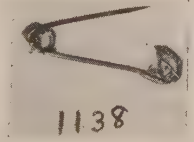
Fbdy. 1076	7 mos.	Open safety-pin	Pharynx, 3 days	None	Laryngoscope	Open safety-pin point up; infant	Alligator Mosher	Keeper	Extraction Cure	2 min. 10 sec.	Oral	Point of pin embedded in right wall of hypopharynx, spring extended down behind cricoid. Point snapped into laryngoscope.
Fbdy. 1084 	10 mos.	Open safety-pin	Esophagus, lower end, 20 days	None	5 mm.	Open safety-pin, point up, in infant	Rotation	Coil spring, endogastric version	Extraction Cure	4 min. 4 sec.	Oral	Endogastric version and closure of pin.
Fbdy. 1085 	46 yrs.	Open safety-pin	Right main bronchus, 36 years	Local	9 mm. aspirating	Open safety-pin, point up, in bronchus; pin much corroded and friable; granulations; pus	Side-curved	Pointed branch	Extraction Cure	19 min. 17 sec.	Oral	Pin found buried in granulation tissue which, with the pin, completely occluded the orifice on expiration; on inspiration two small air spaces opened up by wafting of granulations. Large amount of pus aspirated. Pin removed in pieces very much corroded. Very protuberant granulations removed with forceps. After removal of pin right bronchus found to be lined with granulation tissue down as far as visible in lower and middle lobes; trachea also lined with granulation tissue above bifurcation. Bronchial walls rigid.

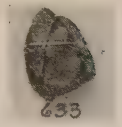
SAFETY PINS—*Continued*

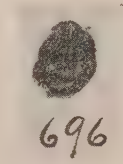
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1092	7 yrs.	Open safety-pin	Larynx, 2 days	None	Anterior commissure laryngoscope	Avoidance of trauma and prevention of loss downward	Alligator	Keeper	Extraction Cure	33 sec.	Oral	Pin embedded in larynx with point buried in cricothyroid membrane. Rotated to disengage point and removed with point on spatular tip of laryngoscope.
Fbdy. 1114 	18 mos.	Closed safety-pin	Larynx and trachea, 2 days	None	Laryngoscope	None	Alligator	Spring end	Extraction Cure	46 sec.	Oral	
Fbdy. 1111 	3 yrs.	Open safety-pin	Esophagus behind heart, 2 days	None	Gastroscope	Large open safety-pin, point up; avoidance of trauma. Child	Rotation	Coil-spring end	Extraction Cure	20 min. 22 sec.	Oral	Removal after closure by endogastric version.

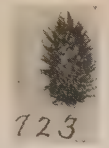
Fbdy. 1120  1120	4 yrs.	Open safety-pin	Larynx, 2 days	None	Anterior commissure laryngoscope	Open safety-pin, point up; avoidance of trauma and prevention of loss downward	Tucker alligator	Pointed branch	Extraction Cure	3 min.	Oral	Removed by point-sheathed method, using alligator form of Tucker forceps.
Fbdy. 1113  1113	8 mos.	Open safety-pin	Esophagus, 1 day	None	Laryngoscope	Avoidance of trauma; open safety-pin, point upward in an infant	Tucker	Pointed branch	Extraction Cure	55 sec.	Oral	Point-sheathed method of removal with Tucker forceps.
Fbdy. 1122 1122	6 wks.	Open safety-pin	Esophagus, spring end below cricopharyngeus, keeper above, 1 day	None	Laryngoscope	Open safety-pin, point up; avoidance of trauma, infant weighing 7 lbs.	Tucker alligator	Pointed branch	Extraction Cure	1 min.	Oral	Removed by point-sheathed method, using alligator form of Tucker forceps.
Fbdy. 1134 1134	9 mos.	Open safety-pin	Stomach, 5 days	None	6 mm. gastroscope	Open safety-pin in stomach of infant	Rotation	Middle of pointed branch, to close, then spring end	Extraction Cure	26 min. 7 sec.	Oral	Blood found in stomach as soon as tube mouth entered. Pin found near pyloric end of stomach. Moved over to cardiac end and closed by pulling branch into tube mouth. Pin then released from forceps and regrasped by spring end and brought out closed.

SAFETY PINS—*Continued*

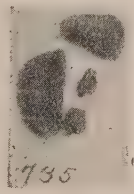
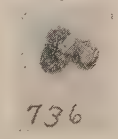
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1135  1135	6 yrs.	Open safety-pin	Esophagus below cricopharyngeus, 1 day	None	Anterior commissure laryngoscope	Open safety-pin, point up: avoidance of trauma	Alligator	Spring end	Extraction Cure	2 min. 59 sec.	Oral	Point-sheathed method.
Fbdy. 1140 	11 mos.	Open safety-pin	Esophagus and hypopharynx, 1 day	None	Laryngoscope	Point embedded in right lateral wall	Rotatation	Keeper	Extraction Cure	2 min. 5 sec.	Oral	Point-sheathed method,
Fbdy. 1138  1138	10 mos.	Open safety-pin	Right bronchus deep down below orifice of middle lobe, 13 days	None	4 mm.	Open safety-pin; point up, in tiny bronchi of infant	Side-curved	Keeper	Extraction Cure	10 min. 57 sec.	Oral	Subglottic and tracheal mucosal swelling. Pin withdrawn through tube after forceps manipulation against lip of bronchoscopic tube mouth.
Fbdy. 1142 1142	11 wks.	Open safety-pin	Hypopharynx, 2 days	None	Laryngoscope	Avoidance of trauma; 11 weeks' old infant	Rotation	Near point	Extraction Cure	2 min. 5 sec.	Oral	Version method.

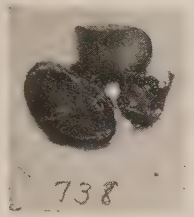
Fbdy. 633 	4 yrs.	Maize	Right bronchus at level of upper lobe bronchus, 24 days	None	5 mm. Bronchoscope	Forceps spaces small and only on inspiration	Peanut		Extraction Cure	3 min. 4 sec.	Oral	Laryngotracheitis. Trachea full of pus. Grain of corn wedged tightly in bronchus.
Fbdy. 641	6 yrs.	Orange seed	Strictured esophagus	None	7 mm.	Tight impaction; slippery surface	Side-curved		Extraction Cure		Oral	Removed from lumen of stricture. Tightly impacted.
Fbdy. 647	4 yrs.	Peanut kernel	Right lower lobe bronchus, 25 days	None	5 mm.	None	Peanut		Extraction Cure	5 min. 26 sec.	Oral	Diffuse laryngo-tracheo-bronchitis (bilateral). Pus discharge diffuse and profuse.
Fbdy. 658	4 yrs.	Maize	Left main bronchus 6 days	None	5 mm.	Friable fbdy. Greatly swollen. Tight impaction	Side-curved		Extraction Cure	3 min. 8 sec.	Oral	Thick gummy pus in trachea. Coin tightly impacted in left bronchial orifice.
Fbdy. 682	5 yrs.	Peanut kernel	Left main bronchus at orifice of upper lobe bronchus, 29 days	None	6 mm.	Friable, swollen, mucosa, pus	Peanut		Extraction Cure	5 min. 58 sec.	Oral	Larynx very much swollen. Pus coming out from posterior commissure. Tracheal mucosa highly inflamed. Rings invisible. Large quantity of pus coming up from right main bronchus. Mucosa of left bronchus more intensely red; more swollen.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 696  696	2 yrs.	Peanut kernel	Right bronchus at orifice of upper lobe bronchus, 9 days	None	4 mm. Bronchoscope	Friable fbdy.	Peanut forceps	Minor axis	Extraction Cure	1 min. 26 sec.	Oral	Very firm stenosis just below cords. Diffuse tracheobronchitis, mucosa intensely red, secretions thick and tough.
Fbdy. 719 719	3 yrs.	Watermelon seed	Left bronchus	None	5 mm.	None			Foreign body coughed up and swallowed Recovered in stools	5 min. 49 sec.		Laryngotracheitis. Intense bronchitis right. Rather abundant mucopus. Intense bronchitis, left. Quite abundant thick mucopus. No foreign body found at bronchoscopy because previously coughed up.
Fbdy. 722 722	10 yrs.	Prune seed	Trachea, 1 day	None	6 mm.	Hard, slippery, sloping surface	Side-curved	Minor axis	Extraction Cure	2 min. 26 sec.	Oral	Seed jammed at bifurcation with lower end in right bronchus. Intense tracheitis. Bronchitis diffuse as far as could be seen. Exceedingly large fbdy. considering size of trachea. Remarkable child did not asphyxiate from jamming of fbdy. crosswise in trachea or subglottic region.

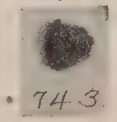
Fbdy. 723 	16 yrs.	Cockleburr	Right lower lobe, 5 months		7 mm. Aspirating bronchoscope				Fbdy. not found at bronchoscopy. Coughed up after bronchoscopy. Recovery	35 min. 1 sec.		All interbronchial spurs lower lobe very much thickened. Mucosa eroded. Covered with granulations in spots. Middle lobe not bronchiectatic. Lower lobe bronchi markedly so. Most of pus seems to come from the lower lobe. The thickening of the interbronchial spurs makes some of the orifices seem stenosed. Below this apparent stenosis the bronchi enlarge.
Fbdy. 724	2 yrs. 3 mos	Watermelon seed	Left main bronchus 6 days	None	5 mm.	None	Side-curved	Flatwise	Fbdy. stripped off in mouth on withdrawal. Recovered in stools	5 min. 56 sec.		Foreign body at orifice of left main bronchus.
Fbdy. 725	21 mos	Peanut kernel	Right bronchus. Aspirated into left bronchus during bronchoscopy, from which it was removed. 2 weeks	None	5 mm.	Swollen mucosa. No forceps spaces, until obtained by manipulation	Peanut	Minor axis	Extraction Cure	13 min. 33 sec.	Oral	Pus coming up when patient coughs. Intense laryngitis. Larynx and subglottic tissue swollen. Superficial ulceration in right bronchus. No foreign body visible. All right lower lobe and middle lobe bronchi intensely inflamed. Pus coming up from all branches. Peanut kernel found in *left* bronchus at orifice of upper lobe bronchus. The ulceration in the right bronchus and the extreme dyspnea which developed immediately after the patient coughed up large quantities of pus render it probable that the pressure of the cough on the right lung squeezed up the the pus accumulation and forced the peanut with it into the trachea whence it was aspirated into the left lung.

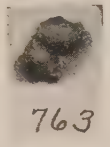
SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 727	1 yr.	Peanut kernel	Right bronchus, 9 days	None	4 mm.	Friable object tightly impacted in a swollen bronchus	Plain		Extraction Cure	6 min. 55 sec.	Oral	Intense laryngitis. Right bronchus swollen almost shut. Peanut kernel tightly impacted in swollen mucosa. Not freely movable.
Fbdy. 732	4 yrs.	Watermelon seed	Right main bronchus, 4 days	None	5 mm.	None	Side-curved	Flatwise	Extraction Cure	2 min. 22 sec.	Oral	Intense diffuse tracheobronchitis.
Fbdy. 735 	7 yrs.	Peanut kernel, 2 pieces	Both bronchi, 15 days	None	6 mm.	Friability of foreign bodies. Fragments of peanut kernel so large that it was impossible to remove them through tube	Peanut	Minor axis	Extraction Cure	7 min.	Oral	Intense tracheobronchitis, diffuse in character. One portion of peanut kernel seen in left main bronchus and two seen in right main bronchus.
Fbdy. 736 	8 yrs.	Almond kernel	Right main bronchus, 9 days	None	6 mm.	None	Peanut		Extraction Cure	9 min. 30 sec.	Oral	Foreign body stripped off at glottis. Some fragments removed; others swallowed. Both bronchi clear on bronchoscopic inspection.

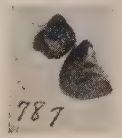
Fbdy. 738 	7 yrs.	Bean	Right bronchus, 15 days	None	6 mm.	Tight impaction. Annular stricture almost closing bronchus rendered difficult the application of forceps. Friable nature of foreign body required delicate grasp sufficient to withdraw it from its bed yet insufficient to crush it	Peanut	Minor axis	Extraction Cure	2 min. 40 sec.	Oral	Intense laryngotracheitis. Subglottic tissue very much swollen. Both main bronchial orifices equally swollen and red. Bean found occluding right bronchus at orifice of upper lobe bronchus. Bean separated on withdrawal from forceps and reaspirated portion went into left bronchus from which it was removed.

SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 743 	2 yrs.	Chestnut kernel	Right bronchus, 1 week	None	5 mm.	Soft, friable, blood-stained pus painted over foreign body	Peanut		Extraction Cure	7 min.	Oral	Left bronchus intensely inflamed. Mucosa swollen and covered with tightly adherent patches of exudate especially about the orifice of the upper lobe bronchus. Left lower lobe bronchus intensely inflamed but no foreign body visible. It was noted that the child became quite cyanotic as soon as a swab was introduced into the bronchoscope when the bronchoscope was in the left bronchus. On introducing bronchoscope into right bronchus chestnut kernel was found in stem bronchus just below the upper lobe bronchus, tightly impacted. Right bronchus inflamed but not nearly so much as left. No exudate or erosion visible in right bronchus. It is quite evident that the foreign body was, until within a few minutes or hours, located in left bronchus, having been coughed up and reaspirated into the right side.
Fbdy. 750	2½ yrs.	Peanut kernel	Right stem bronchus, 1 mo.	None	5 mm.	Soft, friable, slippery	Peanut		Extraction Cure	3 min. 18 sec.	Oral	Mild degree of bronchitis. Diffuse. Very little pus. Kernel found in right stem bronchus just below orifice of upper lobe bronchus. Free in lumen. Not clamped in swollen mucosa. Intense diffuse bronchitis, with copious pinkish pus that we have found in all but one of the cases of peanut kernels in the bronchi was noticeably absent in this case.

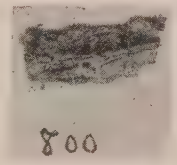
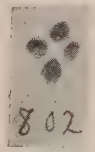
Fbdy. 756	8 yrs.	Peanut kernel	Trachea, 1 day	None	6 mm.	None	Peanut		Extraction Cure	5 min. 46 sec.	Oral	Subglottic tissues very much swollen. Larynx and trachea intensely inflamed. Both main bronchi equally inflamed. Foreign body flying back and forth between right bronchus and upper trachea being forced against the distal end of the bronchoscope during cough. Secretions abundant and blood-stained but not purulent so far as noticed.
Fbdy. 763 	15 mos.	Walnut kernel	Right main bronchus, 7 days	None	5 mm.	None	Forward grasping		Extraction Cure	7 min. 3 sec.	Oral	Larynx intensely swollen. Firm swelling of trachea which required considerable manipulation to pass with tube. Portion of walnut kernel completely occluding the right main bronchus at the level of the upper lobe bronchus. Firm swelling surrounding foreign body. Orifice of left bronchus swollen. Quantities of pinkish thick gummy pus removed by sponge pumping.
Fbdy. 767	3 yrs.	Peanut kernel	Left lower lobe bronchus, 4 weeks	None	5 mm.	No forceps spaces	Peanut		Extraction Cure	2 min. 24 sec.	Oral	Trachea and both bronchial orifices much swollen. Left main bronchus swollen nearly shut. Bronchial rings and all bronchial landmarks obliterated by the swollen mucosa. Gush of pus when peanut was removed. Gross appearances of pus were typically those of "arachidic bronchitis." The pus was thick though not creamy; stringy, not "short." It was pinkish in color and its coming up copiously after removal of the peanut indicated a large area of "drowned lung" below the obstructive foreign body.

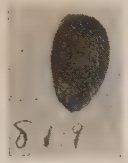
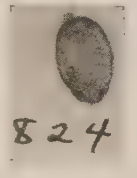
SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 769	6 yrs.	Peanut kernel	Trachea, 3 days	None	6 mm.	Great quantities of pink pus	Peanut	Minor axis	Extraction Cure	1 min. 6 sec.	Oral	Subglottic swelling very marked. High degree of tracheitis with considerable quantities of mucoid-looking secretion.
Fbdy. 781	3 yrs.	Peanut kernel	Right main bronchus, one portion at orifice of upper lobe bronchus, second portion in stem bronchus just below, 1 week	None	5 mm.	Very friable; little cohesion; over-roasted	Peanut		Extraction Cure	3 min. 26 sec.	Oral	When first portion of peanut kernel was withdrawn the lower one was coughed up into trachea from which it was removed by reinsertion of bronchoscope.
Fbdy. 783	2½ yrs.	Maize	Moving between trachea and bronchi; removed from left inferior lobe bronchus, 4 days	None	5 mm.	Seizure well beyond the "germ" of the kernel	Plain	Beyond germ which was uppermost	Extraction Cure	4 min. 53 sec.	Oral	Diffuse tracheobronchitis. Patch of exudate about one square cm. in area at the orifice of the right main bronchus.
Fbdy. 787 	21 mos.	Peanut kernel	One portion in trachea, other portion in left bronchus, 17 days	None	5 mm.	Soft, friable; pus	Peanut		One portion extracted Others coughed out through tube	1 min. 17 sec.	Oral	Trachea intensely red. No rings visible. Mucosa swollen.

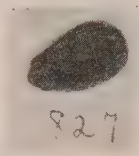
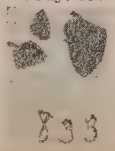
Fbdy. 789	2 yrs.	Peanut kernel	Right bronchus at orifice of upper lobe bronchus, 19 days	None	5 mm.	None	Peanut	Minor axis	Extraction Cure	57 sec.	Oral	Entire half of peanut kernel found. Not tightly impacted
Fbdy. 790	5 yrs.	Maize	Trachea, germ end up, 6 days	None	4 mm.		Plain	Beyond germ	Extraction Cure		Oral	Subglottic masses of swollen mucosa projecting in from both sides toward the center line making subglottic lumen less than half of that of the glottis. Baby size tube used because of swollen condition of subglottic tissue. Grain of corn found free in trachea slapping up against tube mouth twice before it was seized and removed.
Fbdy. 792	8 yrs.	Prune seed	Trachea, 3 days	None	6 mm.	None	Plain cupped centers	Minor axis	Extraction Cure	4 min. 49 sec.	Oral	Extremely large size and very plump shape of prune seed accounted for extreme dyspnea of child on admission. Relief great the moment prune seed was out.
Fbdy. 799	3 yrs.	Peanut kernel	Right main bronchus near orifice of middle lobe bronchus, 16 days	None	5 mm.	Extremely swollen condition of the bronchial mucosa	Plain		Extraction Cure	7 min. 4 sec.	Oral	Severe diffuse laryngo-tracheo-bronchitis. Marked subglottic swelling. Right bronchial stem from middle to upper lobe bronchus full of mucopurulent secretion. Peanut kernel grasped and withdrawn but broke on emerging from glottis. One fragment was reaspirated and was found wedged in orifice of left upper lobe bronchus.

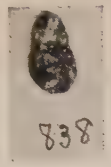
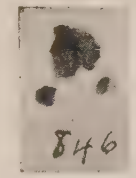
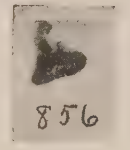
SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 800 	14 mos.	Portion peanut shell	Trachea subglottic, about 2 hours	None	4 mm.	None	Alligator	Flatwise	Extraction Cure	30 sec.	Oral	Piece of peanut shell completely sagittally in trachea, immediately below glottis.
Fbdy. 802 	2 yrs. 11 mos.	Peanut kernel	Right bronchus just below bifurcation, 11 days	None	5 mm.	No forceps spaces	Peanut		Extraction Cure	13 min. 2 sec.	Oral	Small fragment of peanut kernel tightly impacted in swollen right bronchus just below bifurcation. Bronchus swollen almost shut. Subglottic trachea greatly swollen, causing acute stenosis just below larynx.
Fbdy. 805	3 yrs.	Maize	Trachea, 6 days	None	5 mm.	None	Peanut	Flatwise beyond germ	Extraction Cure	2 min. 24 sec.	Oral	Very mild degree of tracheo-bronchitis.
Fbdy. 815	2½ yrs.	Peanut kernel	Left main bronchus, 4 days	None	5 mm.	No forceps spaces	Peanut		Extraction Death 3 days after discharged well, from apparently "croup" (subglottic edema?)	1 min. 12 sec.	Oral	Marked subglottic swelling. Pinkish, very tenacious, mucopurulent secretion covered mucosa; not very copious in amount. Left main bronchus full of secretion up to the level of the carina. No air coming up through secretion.

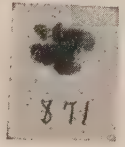
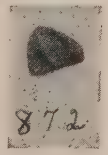
Fbdy. 819 	4 yrs.	Watermelon seed	Left main bronchus 6 days	None	5 mm.	None	Plain	Flatwise	Extraction Cure	10 min.	Oral	Thick creamy pus very tenacious, adhering to trachea and both main bronchi. Fbdy. heard beating against glottis just before laryngoscope was introduced, but it must have been quickly aspirated into the left bronchus where it was found with bronchoscope.
Fbdy. 822	5 yrs.	Maize	Trachea, 5 days	None	5 mm.		Side-curved	Flatwise beyond germ	Extraction Cure	1 min. 52 sec.	Oral	Exudate attached to the subglottic mucosa. Removal of one shred left a bleeding surface like diphtheritic membrane.
Fbdy. 823	2 yrs.	Peanut kernel	Trachea, 7 days	None	5 mm.	None	Peanut		Extraction Cure	9 min. 48 sec.	Oral	Diffuse tracheobronchitis. Marked subglottic swelling; rings of trachea invisible.
Fbdy. 824 	5 yrs.	Watermelon seed	Left main bronchus, 16 days	None	5 mm.	None	Plain	Flatwise	Extraction Cure	1 min. 12 sec.	Oral	Foreign body found with its largest plane vertical. Air passing by both the inner and outer sides of the watermelon seed.

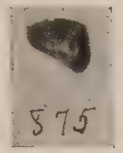
SEEDS, NUTS AND SHELLS—*Continued*

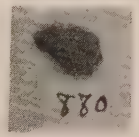
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 827 	2 yrs.	Watermelon seed	Trachea, 5 days	None	5 mm.	None	Side-curved	Flatwise	Extraction Cure	5 min. 40 sec.	Oral	
Fbdy. 828 No Specimen	3 yrs.	Peanut kernel	Right main bronchus, 12 days	None	5 mm.	None	Peanut		Extraction Cure	6 min. 3 sec.	Oral	Right main bronchus obstructed by pultaceous mass of peanut kernel. When disimpacted it came away in small fragments in secretions. Diffuse tracheobronchitis less marked on left side; very intense on right side especially at location of peanut kernel and also in the subglottic region.
Fbdy. 832	2 yrs. 8 mos.	Chestnut kernel	Left main bronchus, 10 days	None	5 mm.	None	Peanut		Portion removed; remainder coughed out through tube; cure	1 min. 3 sec.	Oral	Two granulation buds seen where nut kernel had lain.
Fbdy. 833 	2 yrs	Coffee berry fragments	Left lower lobe bronchus, 2 weeks	None	5 mm.	Tight impaction in bronchus	Side-curved		Extraction Death	20 min.	Oral	Death from lobar pneumonia 1 month after removal of foreign body.

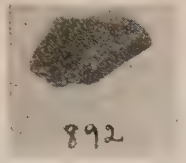
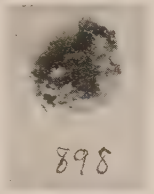
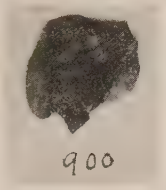
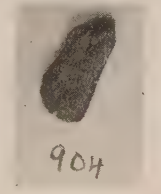
Fbdy. 838 	1 yr.	Maize	Left main bronchus, 3 days	None	4 mm.	Inflammatory acute stenosis of bronchus	Plain		Extraction Cure	1 min. 2 sec.	Oral	Subglottic edema; diffuse laryngotracheobronchitis. left main bronchial orifice swollen almost shut; erosion with reddened edges almost all way around the left bronchial orifice. Edematous orifice dilated with forceps and grain of corn found at the giving off of the left upper lobe bronchus.
Fbdy. 839	22 mos.	Watermelon seed	Right main bronchus at level of upper lobe, about 3 months	None	5 mm.	Flooding of pus	Plain	Flatwise	Extraction Cure	1 min. 3 sec.	Oral	Large amount of pus in trachea and coming up both bronchi.
Fbdy. 846 	23 mos.	Peanut kernel	Right main bronchus, 19 days	None	5 mm.	Acute inflammatory stenosis of bronchus	Plain		Extraction Death	5 min. 23 sec.	Oral	Larynx somewhat inflammatory above cords; subglottic region severely inflamed and swollen. Trachea in high state of inflammation. Right bronchial orifice swollen and very red. Left bronchial orifice much less so. Abscess right lower lobe drained bronchoscopically 13 days after removal of fbdy. Death a week later from rupture of lung abscess and liberation of a large accumulation of pus.
Fbdy. 856 	21 mos.	Peanut kernel	Occluding orifice of right upper lobe bronchus, 3 mos.	None	4 mm.	Location of fbdy. in upper lobe bronchus. Smoothness, softness and slipperyness of fbdy.	Peanut		One portion removed, other portion coughed out thro' bronchoscope	4 min. 32 sec.	Oral	Diffuse tracheobronchitis; not nearly so much secretion as usually seen in peanut cases.

SEEDS, NUTS AND SHELLS—*Continued*

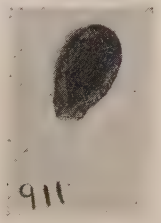
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 871 	2 yrs.	Peanut kernel fragments	Left main bronchus, at orifice of upper lobe, about 3 months	None	5 mm.	Great quantities of pus	Peanut		Two portions removed; another portion coughed out thro' bronchoscope	5 min. 59 sec.	Oral	Trachea chronically inflamed; no rings visible. Left bronchus completely full of pus (full as a bottle) no air passing. No cough could expel it until after the swab had been introduced two or three times. Left main bronchus elliptical in outline; granulation tissue on inner wall; peanut kernel immediately below granulation tissue, very soft under forceps; large quantity of thick, creamy pinkish pus liberated by removal of peanut. Removed by sponge pumping. Entire lower lobe seems to be involved in either drowned lung or abscess, probably partially both.
Fbdy. 872 	2 yrs.	Portion almond kernel	Right inferior lobe bronchus immediately below orifice of middle lobe bronchus, about 3 months	None	5 mm.		Peanut	Equator	Extraction Cure	2 min. 2 sec.	Oral	

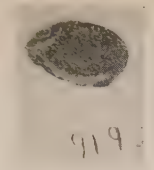
Fbdy. 875 	2 yrs.	Peanut kernel	Right main bronchus below orifice of upper lobe bronchus, 6 days	None	4 mm.	Acute inflammatory stenosis of bronchus	Peanut		Extraction Cure	1 min. 55 sec.	Oral	Subglottic edema so great as to present considerable obstruction to the introduction of the 4 mm. bronchoscope. Tracheal rings obliterated by swelling of mucosa; upper portion of left main bronchus noted in passing was distinctly inflammatory though somewhat less so than the right; right main bronchus very much swollen in its upper part; peanut kernel was moving up and down in respiratory current; at each inspiration it would go downward, leaving plenty of by-passage for air on three of its sides; on expiration it would move upward and fit tightly in the edematous portion of the bronchus. The action noted in this case, simulating a "ball-valve" with the ball rising from below and fitting tightly into the edematous portion of the bronchus which served as a valve-seat, is different from the action usually noted in peanut cases; namely, the expansion of the bronchi at the site of the peanut kernel making ample by-passage spaces, which are immediately closed at the beginning of expiration.
Fbdy. 877 No Specimen	3 yrs.	Peanut kernel	Right inferior lobe bronchus at orifice of middle lobe bronchus, 8 days	None	5 mm.	Acute inflammatory stenosis of bronchus	Mosquito		Extraction Cure	14 min. 59 sec.	Oral	Bronchial mucosa on right side very red and swollen; lumen diminished to not more than one-third average normal diameter for a child of this age. Peanut slipped off forceps at pharynx and was swallowed

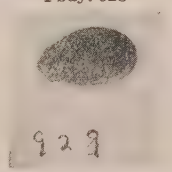
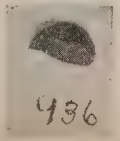
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 880 	15 mos.	Peanut kernel	Right main bronchus, 9 days	None	4 mm.	Acute inflammatory stenosis of bronchus	Peanut		Extraction Cure	1 min. 5 sec.	Oral	Subglottic region swollen almost shut, looking acutely edematous; much thick, tenacious pus in trachea and orifices of both bronchi.
Fbdy. 884	31 mos.	Peanut kernel	Right main bronchus, 2 days	None	5 mm.	Large size and friability of fbdy.	Peanut		Extraction Cure	7 min. 3 sec. 5 min. 56 sec.	Oral	Subglottic edema worse on left side. Laryngotracheobronchitis not so severe as in some peanut cases but the subglottic edema fully as marked as in the most severe cases. Second portion of peanut kernel removed bronchoscopically one week after removal of first portion.
Fbdy. 890	4 yrs.	Peanut kernel	Right main bronchus, 7 days	None	5 mm.	Tight impaction and friability	Peanut		Extraction Cure	23 min. 47 sec.	Oral	
Fbdy. 891	27 mos.	Peanut kernel	Trachea at bifurcation, obstructing both bronchi, 8 days	None	5 mm.	Threatened asphyxia	Peanut		Extraction Cure	2 min. 5 sec.	Oral	Marked swelling of the subglottic area and of the tracheal mucosa.

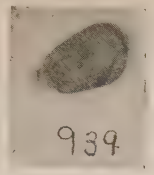
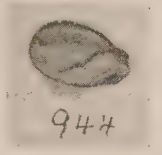
Fbdy. 892 	2 yrs.	Peanut kernel	Trachea, 2 days	None	5 mm.	Quantities of pus	Side-curved		Extraction Cure	59 sec.	Oral	Foreign body surrounded by a thick accumulation of pus.
Fbdy. 898 	15 yrs.	Portion corn stalk	Right stem bronchus, 5 weeks	None	6 mm.	No forceps spaces even on inspiration	Side-curved		Extraction Cure	3 min. 25 sec.	Oral	All of the bronchi on right side very much inflamed. Left bronchial orifice likewise. Deeper part of left bronchus not explored. After removal small bronchi noticed to be emptying themselves of streams of pus.
Fbdy. 900 	3½ yrs.	Bean	Trachea, 2 days	None	5 mm.	Large size of foreign body jammed in glottic chink	Fenestrated		Extraction Cure		Oral	Tracheotomy required for urgent dyspnea; bean then found above tracheotomy cannula and removed orally.
Fbdy. 904 	5½ yrs.	Peanut kernel	At junction of left upper lobe bronchus with stem bronchus	None	6 mm.	Forceps spaces on one side only	Fenestrated		Extraction Cure	3 min. 2 sec.	Oral	Subglottic swelling; acute laryngotracheobronchitis with a large quantity of purulent secretion tightly adherent to the mucosa everywhere. Left bronchial orifice more swollen than the right.

SEEDS, NUTS AND SHELLS—*Continued*

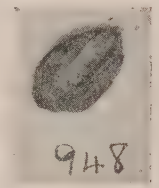
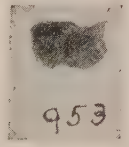
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 905	3 yrs.	Peanut kernel	Right main bronchus at orifice of upper lobe, 1 week	None	5 mm.	Acute inflammatory stenosis; friable fbdy.	Fenestrated		Extraction Cure	1 min. 59 sec.	Oral	Diffuse laryngotracheobronchitis. Secretions very thick and tough, but scanty in quantity.
Fbdy. 911 	11 mos.	Watermelon seed	Trachea, 4 days	None	4 mm.	None	Plain	Flatwise	Extraction Cure	4 min. 39 sec.	Oral	Intense subglottic swelling nearly meeting in the median line; intense tracheitis.
Fbdy. 918	4 yrs.	Watermelon seed	Trachea, 3 days	None	5 mm.	Slippery moving fbdy.	Side-curved	Flatwise	Extraction Cure	23 sec.	Oral	Larynx and trachea very edematous. Not a great deal of secretion present.

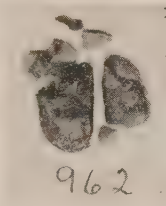
Fbdy. 919 	2 yrs.	Watermelon seed	Trachea, 3 days	None	5 mm.	Fbdy. moving about	Side-curved	Flatwise	Extraction Cure	1 min. 3 sec.	Oral	Watermelon seed free in trachea causing a fluttering, flapping sound as soon as the bronchoscope entered. Secretion very copious. Inflammation intense. Trachea swollen.
Fbdy. 920	3 yrs.	Peanut kernel	Right main bronchus, 15 days	None	5 mm.		Fenestrated		Extraction Cure	1 min. 1 sec.	Oral	Diffuse laryngotracheobronchitis. Pharynx intensely inflamed.
Fbdy. 924	17 yrs.	Grape seed	Esophagus	None	8 mm.	Moving about in folds	Plain cupped			1 min. 58 sec.	Oral	Removed during esophagoscopy for treatment of phrenospasm.
Fbdy. 927	5 yrs.	Watermelon seed	Trachea, 5 days	None	5 mm.	Constantly changing position of forceps spaces	Side-curved	Flatwise	Extraction Cure	3 min. 34 sec.	Oral	Moderate degree of subglottic swelling. Marked laryngotracheitis with very scanty secretions.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 928 	15 mos.	Watermelon seed	Trachea, 70 days	None	5 mm.	Constantly shifting forceps spaces	Side-curved	Flatwise	Extraction Cure	2 min. 45 sec.	Oral	Laryngotracheitis is very marked. Subglottic swelling on both sides projecting toward the midline. Considerable quantity of tough secretion visible in trachea.
Fbdy. 931	3½ yrs.	Maize	Trachea, 16 days	None	5 mm.	Forceps spaces very small	Alligator	Flatwise	Extraction Cure	26 sec.	Oral	Immediately below glottis.
Fbdy. 932	56 yrs.	Peanut kernel	Right inferior lobe bronchus, 45 days	Local	7 mm.	Lodged in small branch bronchus	Plain cupped		Extraction Cure	13 min. 52 sec.	Oral	Mucosa of entire right bronchial tree so far as visible inflammatory. Superficial erosion at site of peanut kernel.
Fbdy. 936 	16 mos.	Peanut kernel	Right bronchus at orifice of upper lobe bronchus, 32 days	None	5 mm.	Acute inflammatory stenosis; friable object	Plain peanut		Extraction Cure	9 min. 35 sec.	Oral	

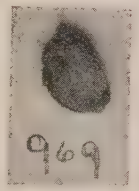
Fbdy. 939 	22 mos.	Maize	Right main bronchus, 4 days	None	5 mm.	No forceps spaces	Side-curved	Flatwise	Extraction Cure	9 sec.	Oral	Secretions rather dry and scanty.
Fbdy. 940	18 mos.	Portion apple stem	Left lower lobe bronchus, about 5 months	None	5 mm.	Enormous amount of secretion	Mosquito		Foreign body expelled through bronchoscope	6 min. 15 sec.	Oral	Secretions abundant; tracheal mucosa highly inflammatory; left bronchial mucosa very inflammatory; lumen collapsed anteroposteriorly during expiration; small dark object seen at orifice of left upper lobe bronchus; displaced with closed forceps; seemed free to move.
Fbdy. 944 	3 yrs.	Watermelon seed	Trachea, 22 days	None	5 mm.	Shifting	Plain	Flatwise		5 min. 30 sec.	Oral	Shifting foreign body fixed with tube mouth for seizure.
Fbdy. 946	4 yrs.	Peanut kernel	Right bronchus at orifice of upper lobe bronchus, 16 days	None	5 mm.	Friable; mucosa swollen	Plain to dislodge; then fenestrated peanut	Minor axis	Extraction Cure	4 min. 2 sec.	Oral	Mucosa swollen.

SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 948 	6 yrs.	Maize	Right stem bronchus, 2 days	None	6 mm.	Large size of swollen fbdy.	Plain	Flatwise beyond germ	Extraction Cure	5 min. 45 sec.	Oral	Intense laryngotracheobronchitis, subglottic edema nearly meeting in the mid-line; both main bronchial orifices swollen to about two-thirds of their normal diameter; grain of corn quite soft to grasp; tightness of fit in glottis prevented removal until third grasping.
Fbdy. 949	16 mos.	Maize	Trachea at bifurcation, 12 days	None	5 mm.	Threatened asphyxia	Side-curved	Flatwise beyond germ	Extraction Cure	1 min. 20 sec.	Oral	Supraglottic and sub-glottic tissues very much inflamed; subglottic tissues bulging toward the median line; tracheal wall swollen.
Fbdy. 953 	15 mos.	Peanut kernel	Trachea, 13 days	None	4 mm.	Shifting friable fbdy.	Fenestrated	Minor axis	Extraction Cure	2 min. 4 sec.	Oral	Diffuse tracheobronchitis.
Fbdy. 956	3 yrs.	Jobs tear	At orifice of left inferior lobe bronchus, 14 days	None	5 mm.	Hard, smooth surfaced fbdy., fitting tightly	Peanut forceps; then cupped		Extraction Cure	7 min. 20 sec.	Oral	Dislodgment of fbdy. liberated a large amount of pus; fbdy. reaspirated into right side from which it was removed.

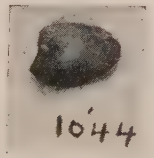
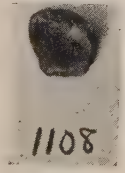
Fbdy. 958	7 yrs.	Maize	Occluding left lower lobe bronchus, 10 days	None	6 mm.	No forceps spaces	Side-curved	Flatwise beyond germ	Extraction Cure		Oral	Grain of corn found entirely occluding the left lower lobe bronchus and partially occluding the left upper lobe bronchial orifice; grain being tightly wedged in the lower lobe bronchus for about two-thirds of its length. Removed after rotating sagitally.
Fbdy. 962 	2 yrs.	Bean	Trachea, obstructing both bronchi at times, about 13 hours	None	5 mm.	Friability of foreign body; threatened asphyxia	Fenestrated		Extraction Cure		2 portions removed orally, remaining portion expelled thro' tracheotomic wound	Urgent dyspnea. Bean found lying across the carina, obstructing both bronchi. Tilting immediately relieved breathing. Fbdy. very friable and soft; broke in forceps; fragments withdrawn through tube. One large portion withdrawn with tube. Third insertion of bronchoscope deemed inadvisable. Large quantity of thick mucilaginous yellow pus removed from trachea by sponge pumping. Tracheotomy required next morning to prevent drowning of patient in his own secretion. Large amount of thick pus was expelled from cannula, relieving dyspnea. Remaining portion of foreign body expelled through tracheotomic wound.
Fbdy. 964	22 mos.	Peanut kernel	Right stem bronchus, just below orifice of upper lobe, 3 days	None	5 mm.	Tight impaction	Slender, then peanut	Minor axis	Extraction Cure	15 min.	Oral	Forceps spaces exceedingly small; slender forceps applied during deep inspiration and kernel withdrawn upward to trachea; seized with peanut forceps and withdrawn thro' glottis, being then swallowed by patient. Fbdy. recovered in stools.

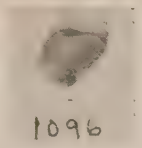
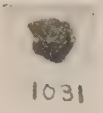
SEEDS, NUTS AND SHELLS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 969 	61 yrs.	Orange seed	In malignant stenosis of esophagus	None	9 mm.	Slippery surface of fbdy.	Plain cupped		Extraction	7 min. 9 sec.	Oral	Fbdy. found in a malignant stricture 20 cm. from upper incisor teeth.
Fbdy. 973	27 mos.	Almond kernel	In trachea and left lower lobe bronchus, 3 days (two different portions)	None	5 mm.	Fbdy. multiple; inflammatory stenosis of bronchi	Side-curved		Extraction	24 min. 4 sec.	Oral	Portion of nut kernel found in trachea and another portion tightly impacted in left lower lobe bronchus. Laryngotracheitis of high degree and a bronchitis throughout both lungs; in the left bronchus there are patches of exudate and a small amount of very tough secretion.
Fbdy. 976	20 mos.	Canna seed	Right stem bronchus, 42 days	None	5 mm.	Tight impaction; smooth, very hard fbdy.	Side-curved cupped face		Extraction Cure	1 min. 21 sec.	Oral	
Fbdy. 980	33 yrs.	Cockleburr	Larynx, 2 days	None	Anterior commissure laryngoscope	None	Alligator		Extraction Cure	52 sec.	Oral	Burr found imbedded in ulceration in the anterior portion of the larynx, requiring considerable traction to disimbed it. No cough.

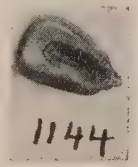
Fbdy. 991	2 yrs.	Peanut kernel	Left lower lobe bronchus, 12 days	None	5 mm.	Acute inflammatory stenosis	Side-curved		Extraction Cure	8 min. 47 sec	Oral	Subglottic tissue somewhat swollen; tracheal mucosa very much swollen, rendering rings invisible; left bronchus swollen almost shut, the remaining chink being closed by secretions which seemed to be mucopurulent rather than pure pus.
Fbdy. 1002	1½ yrs.	Peanut kernel	Trachea, 3 days	None	5 mm.	Acute inflammatory stenosis	Side-curved	Minor axis	Extraction Cure	2 min. 40 sec.	Oral	Intensely swollen subglottic tissue; intense tracheitis; secretions thick and tenacious.
Fbdy. 1004	7 yrs.	Coffee berry	Left stem bronchus, 16 days	None	5 mm.	Acute inflammatory stenosis	Side-curved	Minor axis	Extraction Cure	5 min. 20 sec.	Oral	Left bronchus filled with pus which welled up. After wiping this away coffee berry could be seen down in stem bronchus below orifice of upper lobe bronchus; in a moment a fresh quantity of thick pus came up and entirely occluded the upper lobe bronchus, the orifice of which was swollen so that its diameter was not more than half of that of the normal in a child of this age.
1019	10 yrs.	Peanut kernel	Right stem bronchus below orifice of middle lobe bronchus, 3 days	None	6 mm. aspirating	Swollen mucosa; friable foreign body	Side-curved	Over equator	Extraction Cure	4 min. 25 sec.	Oral	Stem bronchus above middle lobe obstructed by mass of granular swollen mucosa of which the largest mass projected posteriorward from anterior wall.

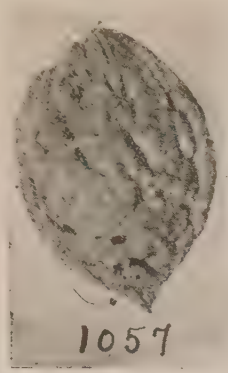
SEEDS, NUTS AND SHELLS—*Continued*

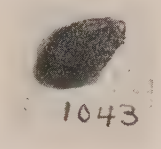
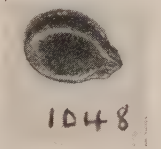
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
No. 1024 No specimen	27 mos.	Peanut kernel (?)	Orifice of left lower lobe bronchus, 8 days	None	4 mm. aspirating	Swollen mucosa; friable foreign body	Side-curved		Extraction Cure	7 min. 13 sec.	Oral	Left bronchus swollen and closing completely on inspiration; plug of pus in orifice of left lower lobe bronchus; felt firm to touch and might have contained peanut kernel. Withdrawn through glottis and lost in pharynx.
Fbdy. 1044  	5½ yrs.	Peanut kernel	Right stem bronchus, 3 weeks	None	5 mm. aspirating	Swollen mucosa; friable foreign body	Side-curved	Minor axis	Extraction Cure	6 min. 7 sec.	Oral	
Fbdy. 1108  	4 yrs.	Peanut kernel	Right bronchus at orifice of upper lobe, 13 days	None	5 mm. aspirating	Swollen mucosa; friable foreign body	Side-curved		Extraction Cure	2 min. 10 sec.	Oral	Bronchial mucosa swollen; moderate amount of pus present.

Fbdy. 1096 	22 mos.	Peanut kernel	Left main bronchus between bifurcation and orifice of upper lobe, 1 day	None	5 mm.	Swollen mucosa; friable foreign body	Side-curved	Equator	Extraction Death	2 min.	Oral	Subglottic tissues somewhat swollen. Trachea and both bronchial orifices intensely red and inflammatory. Second bronchoscopy; larynx and subglottic tissue swollen. Trachea swollen and compressed from posterolateral wall. Carina unusually broad. Right main bonchus swollen entirely shut. Full of thick secretion. No foreign body seen. Bronchus dilated and secretions aspirated.
Fbdy. 1031 	22 yrs.	Grain of corn (fresh)	In strictured esophagus, 4 days	None	7 mm.	Foreign body tightly wedged in strictured esophagus like cork in bottle	Plain	Flatwise, advancing forceps well on to center of foreign body	Extraction Recovery	3 min.	Oral	After removal of corn stricture seen to be about 3 or 4 mm. in diameter at top. About 1 cm. deeper down was seen a smaller stricture and below that point the lumen of stricture deviated.
Fbdy. 1072	4 yrs.	Grain of corn (maize)	Right main bronchus, 2 days	None	5 mm. aspirating	Shifting forceps spaces		Flatwise	Extraction Cure	2 min. 52 sec.	Oral	Grain of corn found loose in trachea; on deep inspiration aspirated into right bronchial orifice. Violent diffuse tracheobronchitis; subglottic tissue much swollen.
Fbdy. 1079	5 yrs.	Grain of corn (maize)	Right main bronchus, 11 days	None	5 mm. aspirating	Swollen kernel, tightly impacted; forceps spaces small and only on inspiration	Light side-curved		Extraction Cure	15 min.	Oral	Bronchoscope filled with mucopurulent secretion on insertion. Corn coughed against end of tube and immediately reaspirated. Mucosa of trachea and bronchi very inflammatory and bathed in mucopus. Lumen of trachea and bronchi completely close on cough. Kernel swollen to double original size.

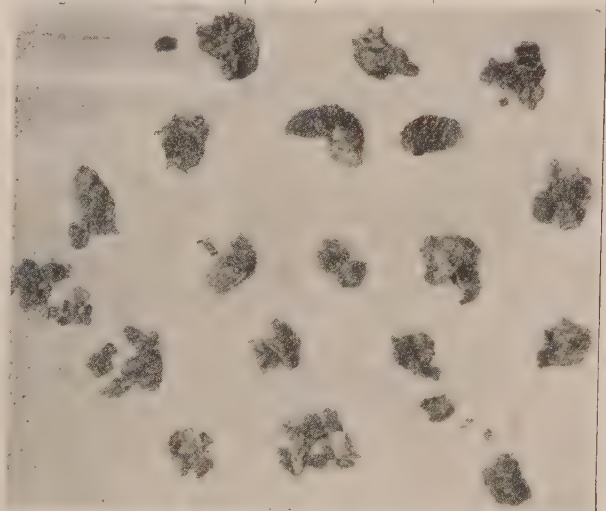
SEEDS, NUTS AND SHELLS—*Continued*

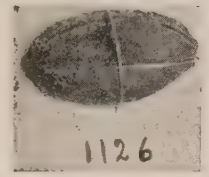
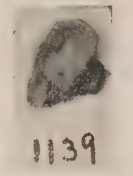
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1127	14 mos.	Grain of corn (maize)	Right main bronchus, few hours	None	4 mm. aspirating	None	Side-curved	Flatwise, beyond edge	Extraction Cure	2 min. 14 sec.	Oral	Marked swelling of larynx and subglottic tissue. Tracheal mucosa quite inflamed. Whitish secretion present. Foreign body found loose in trachea, but was aspirated into right bronchus during inspiration. Tracheotomy necessary because of subglottic edema.
Fbdy. 1144 	3 yrs.	Grain of corn (maize)	Trachea, 9 days	None	5 mm.	Shifting forceps spaces	Side grasping	Flatwise beyond edge	Extraction Cure	3 min. 10 sec.	Oral	Grain of corn loose in trachea. Considerable thin secretion present.
Fbdy. 1042	11 yrs.	Portion almond shell	Right stem bronchus, 3 months	None	6 mm. aspirating	Foreign body in granulating abscess	Side-curved	Flatwise	Extraction Recovery	8 min. 5 sec.	Oral	On insertion of bronchoscope very foul stale odor quite characteristic of prolonged sojourn of foreign body came through bronchoscope. Trachea and left bronchial orifice inflammatory. Right bronchus lined with granulation tissue bleeding freely. Large quantity of pus liberated as soon as almond shell removed.

Fbdy. 1057 	33 yrs.	Peach stone	Esophagus below cricopharyngeal fold, 2 days	None	Short lipped speculum Forbes	Tight impaction; large size	Alligator rotation	Minor axis	Extraction Cure	13 min. 39 sec.	Oral	Larynx and subglottic structures red and edematous, bathed with thin, whitish pus. Bronchoscope met with slight resistance at the glottis. Bean was coughed into end of tube and immediately reaspirated into right main bronchus, the upper end projecting above the carina. Bean grasped with side curved forceps over minor axis, withdrawn against bronchoscope. Bronchoscope forceps and bean withdrawn until bean was brought into glottis where it met with firm resistance and when steady traction was made bean broke in middle, lower half remaining in trachea, upper half with greater portion of hull removed with bronchoscope. Bronchoscope reinserted. Trachea contained whitish pus which was aspirated and remaining lower half of bean was found re-aspirated into right main bronchus. Remainder of hull coughed out through bronchoscope. Remaining portion of bean was in two pieces, smaller portion removed through bronchoscope; larger was brought against end of tube and removed along with bronchoscope.
Fbdy. 1068	5 yrs.	Bean	Right main bronchus, 3 days	None	6 mm.	Soft, pulpy macerated friable foreign body with loose cortex	Side-curved		Extraction Cure	12 min. 30 sec.	Oral	

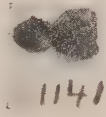
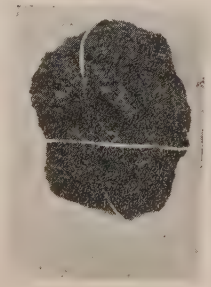
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1043 	2 yrs.	Watermelon seed	Trachea, 8 days	None	5 mm.	Friable foreign body	Plain	Flatwise	Extraction Cure	2 min. 10 sec.	Oral	
Fbdy. 1048 	5 yrs.	Watermelon seed	Right bronchus at orifice of upper lobe bronchus, 5 days	None	5 mm. aspirating	Tight impaction; swollen mucosa	Side-curved	Flatwise	Extraction Cure	1 min. 7 sec.	Oral	Bronchial mucosa very inflammatory, thick and velvety.
No. 1090 No Specimen	2 yrs. 4 mos.	Watermelon seed (?)	Left bronchus, 1 month	None	5 mm.	Swollen mucosa	Side-curved	Flatwise	Extraction Cure	13 min. 50 sec.	Oral	Left bronchus completely closed on expiration by polypoid granulomata and granulations; removed. Small firm mass of unknown character grasped with forceps. Part removed in forceps and part stripped off in pharynx.
Fbdy. 1020	5 yrs.	Job's tear (seed of lachrima Jobi)	Right bronchus at orifice of upper lobe bronchus, 1 day	None	5 mm. aspirating	Smooth conoidal foreign body tightly impacted	Plain	Minor axis	Extraction Cure	6 min. 50 sec.	Oral	Bead loose in trachea, on inspiration it would go into right bronchus. Removed from this location.

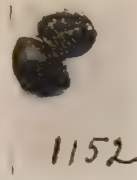
Fbdy. 1021	2 yrs.	Cedar leaves	Pharynx overhanging orifice of larynx, 5 hours	None	None	Prevention of escape downward	Angular with tongue depressor		Extraction Cure		Oral	Spines anchored in mucosa.
Fbdy. 1030	43 yrs.	Egg-shell	Esophagus in middle third	None	9 mm.	Friable foreign body imbedded in ulcer	Plain	Flatwise	Extraction Cure	11 min. 25 sec.	Oral	Esophagus found swollen shut; intensely inflamed and an ulcerated bleeding point found on posterior wall with egg-shell embedded in ulceration.
No. 1098 No Specimen	20 mos.	Peanut kernel	Left bronchus, 5 days	None	5 mm.	Swollen mucosa; shreds of membrane	Gauze sponges		Recovery	3 min. 20 sec	Oral	Right bronchus normal. Left bronchial orifice nearly closed; mucosa swollen, red and edematous. Shreds of membrane coming up along with thick crusts. No peanut kernel found but a number of tiny crumbs seen attached to mucosa.
Fbdy. 1118	2 yrs.	Peanut kernel	Orifice of right bronchus, 1 day	None	5 mm.	Swollen mucosa; friable foreign body	Side-curved	Equator	Extraction Cure	1 min. 25 sec.	Oral	Subglottic tissue very much swollen, considerable amount of pus in trachea and bronchi.

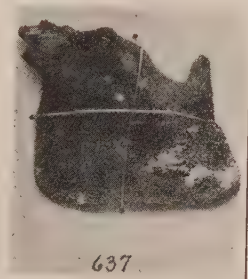
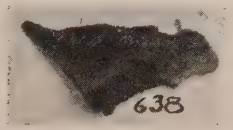
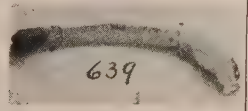
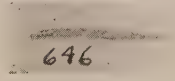
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1119 	2 yrs.	Bronchial casts (18 casts and crusts in all)		None	5 mm.	Respiratory arrest; death impending from obstruction of both main bronchi	Side-curved		Recovery			Same case as above. Second bronchoscopy showed inflamed bronchial mucosa with thick crusted secretion, particles of which were removed with forceps. After withdrawal of bronchoscope child coughed up a crust representing a partial cast of a bronchus. Breathing relieved. 18 bronchoscopies done in five days; each time impending death by asphyxia was averted.
Fbdy. 1123	2 yrs.	Peanut kernel	At orifice of right bronchus; portion projecting into trachea, 3 days	None	5 mm.	Friable foreign body	Side-curved	Minor axis	Extraction Cure	57 sec.	Oral	

Fbdy. 1145	13 mos.	Peanut kernel	Left main bronchus, 2 days	None	4 mm.	Friable foreign body	Side-curved	Minor axis	Extraction Cure	7 min. 45 sec.	Oral	Slight swelling of subglottic tissues. Trachea and bronchus bathed in thin whitish pus. Peanut in left main bronchus just beyond carina. Kernel broke in forceps at glottis during removal; portion coughed up; remaining portion removed. Pus came up freely from below nut kernel.
Fbdy. 1124	42 yrs.	Portion crab shell	Esophagus just below cricopharyngeal muscle, 5 days	None	Forbes speculum	Proper presentation free of folds	Rotation	Flatwise	Extraction Cure	1 min. 24 sec.	Oral	
Fbdy. 1126 	3 yrs.	Prune seed	Esophagus, 2 days	None	7 mm.	Hard	Plain	Minor axis	Extraction Cure	1 min. 15 sec.	Oral	Old lye stricture case. Foreign body found embedded in strictured lumen of esophagus. Zone of esophagitis found surrounding location of foreign body.
Fbdy. 1139 	13 mos.	Bean	Right main bronchus extending above carina, 1 day	None	4 mm.	Soft, pulpy friable foreign body	Side grasping	Equator	Extraction Cure	16 min.	Oral	Marked swelling of subglottic tissues and tracheal mucosa. Whitish secretion present in trachea.

SEEDS, NUTS AND SHELLS—*Continued*

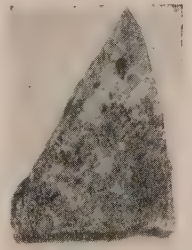
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1141 	2 yrs.	Walnut kernel	Right stem bronchus, below upper lobe, 4 days	None	5 mm.	Friable foreign body	Side grasping	Equator	Extraction Cure	5 min. 46 sec.	Oral	Small amount of thick secretion found in trachea which was aspirated. Mucous membrane of trachea inflamed. Pus coming from right bronchus.
Fbdy. 1133	19 yrs.	Portion of cork	Right bronchus below orifice of middle lobe, 1 month	Local	8 mm. aspirating	Foreign body located below stenosis	Side-curved	Equator	Extraction Cure	1 min. 47 sec.	Oral	Projecting masses of granulations lining right bronchus from the orifice of upper lobe bronchus downward; cork found below a point completely occluded by granulation tissue.
Fbdy. 1143 	39 yrs.	Portion of clothing (shirt)	Left lower lobe bronchus, 2 years	None	Pleurscope	Finding foreign body in fistulae	Side-curved		Extraction		Thru wound in chest; pleuroscopy	Foreign body removed during retrograde bronchoscopy. Wound in left chest explored. There was marked pulsatory movement of lung. A large bronchus with the lumen almost completely plugged could be made out, a large plug about ½ x 1½ inches removed and full lumen of bronchus revealed. Considerable pus was present and air bubbled through freely.

Fbdy. 1152 	18 mos.	Grain of corn (maize	Right bronchus below orifice of upper lobe bronchus, 12 days	None	5 mm.	Swollen macerated foreign body tightly impacted; no forceps spaces	Side-curved	Flatwise beyond edge	Extraction Cure	3 min.	Oral	Diffuse bronchitis, both sides; worse in region of corn. Corn soft and pulpy.
No. 1154 No specimen	7 yrs.	Grain of corn (maize)	Right main bronchus, 3 days	None	6 mm.	Swollen kernel, impacted	Side-curved	Flatwise beyond edge	Extraction Cure	6 min. 35 sec.	Oral	
Fbdy. 1014	3 yrs.	Peanut kernel	Right stem bronchus just below orifice of right upper lobe bronchus, 1 day	None	5 mm. aspirating	Swollen mucosa obliterating forceps spaces; impacted friable foreign body		Over equator	Extraction Cure	8 min. 32 sec.	Oral	Subglottic tissue swollen, leaving only a very small chink apparently just sufficient in area to keep patient from getting cyanotic. Both bronchi swollen nearly shut. Foreign body removed. Two subsequent bronchoscopies. *Second bronchoscopy:* Subglottic tissue swollen. Larynx infiltrated. Left main bronchus swollen, diminishing lumen to about a half normal diameter. No foreign body visible. All visible bronchial orifices swollen nearly shut. Diffuse bronchitis. Mucosa thick, red and velvety. *Third bronchoscopy:* Left bronchus swollen from bifurcation downward, lumen closing during expiration completely. Left inferior lobe bronchus swollen entirely shut at orifice of upper lobe bronchus. Exploration of lower lobe bronchus failed to reveal any remaining fragment of nut kernel.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 637 	60 yrs.	Pork bone	Esophagus below cricopharyngeus, 3 days	None	9 mm.	None	Rotation	Rounded corner	Extraction Cure	1 min. 21 sec.	Oral	
Fbdy. 638 	48 yrs.	Lamb bone	Esophagus level of middle of thyroid cartilage, 2 days	None	9 mm.	Sharp pointed conoidal piece of bone with point uppermost and embedded	Rotation	One end	Extraction Cure	6 min. 23 sec.	Oral	
Fbdy. 639 	59 yrs.	Bone	Esophagus level of hyoid bone, 3½ hours	None	9 mm.	Bone wedged with both ends in cicatricial pockets	Rotation	One end	Extraction Cure	13 sec.	Oral	
Fbdy. 646 	24 yrs.	Fish bone	Overhanging larynx, 2 days	None	Laryngoscope	None	Alligator	As presented	Extraction Cure	10 sec.	Oral	

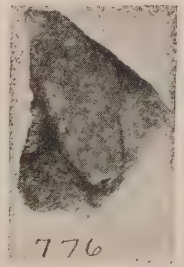
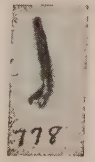
Fbdy. 667	38 yrs.	Chicken bone	Esophagus below cricopharyngeal fold, 6 days	None	9 mm.	Finding bone in bed of ulcerated granulated tissue	Rotation	One end	Extraction Cure	7 min. 43 sec.	Oral	Granulating ulcer below cricopharyngeal fold.
Fbdy. 674	53 yrs.	Bone	Esophagus below cricopharyngeus, 2 days	None	9 mm.	Points buried in each lateral wall	Rotation	One end	Extraction Cure	3 min. 42 sec.	Oral	Localized esophagitis.
Fbdy. 685	34 yrs.	Bone	Esophagus below cricopharyngeus, 1 day	None	9 mm.		Rotation		Extraction Cure	2 min. 11 sec.	Oral	

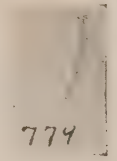
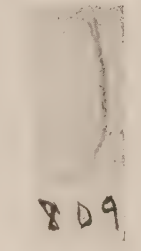
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 706	8 yrs.	Chicken bone	Larynx	None	7 mm.	None	Rotation	One angle	Extraction Cure	1 min. 30 sec.	Oral	Intense laryngitis. Slight erosion.
Fbdy. 714	44 yrs.	Fish bone	Esophagus, 2 days	None	9 mm.	Thin rib bone buried up to one point in mucosa	Side-curved	Point	Extraction Cure	3 min. 26 sec.	Oral	
Fbdy. 729 	4 yrs.	Beef bone	Esophagus, 14 days	None	Esophageal speculum	Bone very tightly impacted below cricopharyngeus	Alligator	One angle	Extraction Cure	2 min. 53 sec.	Oral	Localized esophagitis. Mass of granulation tissue in right pyriform sinus.

Fbdy. 751	44 yrs.	Beef bone	Esophagus, 17 days	None	9 mm.	Extremely tight impaction of a very large foreign body below cricopharyngeus; long angles buried in mucosa and covered over with shreds of mucus membrane. Malpresentation	Rotation	Lesser diameter after version	Extraction Cure	14 min. 36 sec.	Oral	Esophageal walls ulcerated.
Fbdy. 752	36 yrs.	Pork bone	Esophagus, 3 days	None	9 mm.	Malpresentation	Rotation		Extraction Cure	37 min. 22 sec.	Oral	Two small black slender objects attached to a tough grey membranous-looking substance were found below the cricopharyngeus. The slender black substances looked like a suture in the esophageal wall. After removing the foreign tissue and the little slender objects, a number of small splinter-like black fragments were seen in the copious, tough, glairy secretions. The site from which the foreign body was removed was eroded and very inflammatory.
Fbdy. 760	61 yrs.	Bone	Esophagus below cricopharyngeus, 5 days	None		None	Rotation		Extraction Cure	39 sec.	Oral	

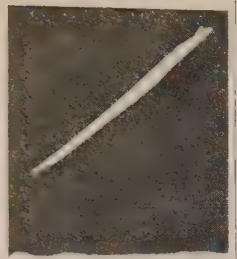
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 776 	46 yrs.	Bone	Esophagus, 11 days	None	9 mm.	Transfixed malpresentation	Rotation		Extraction Cure	3 min. 8 sec.	Oral	Bone transfixed crosswise just below point where inspiratory opening of the lumen of the thoracic esophagus took place (and normally takes place). Patient had a goitre which caused some compression stenosis of the cervical esophagus.
Fbdy. 777	46 yrs.	Fish bone	Left tonsil about 3 hours						Extraction Cure			
Fbdy. 778 		Fish bone	Laryngopharynx						Extraction Cure			

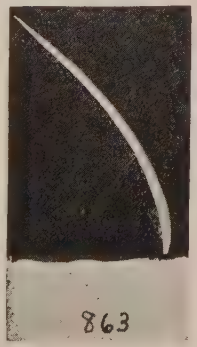
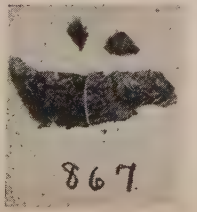
Fbdy. 779 	15 yrs.	Fish bone	Left tonsil, 1 day						Extraction Cure			
Fbdy. 784	32 yrs.	Fish bone	Laryngopharynx 1 day						Extraction Cure			
Fbdy. 809 	51 yrs.	Fish bone	Lingual tonsil, 1 day						Extraction Cure			

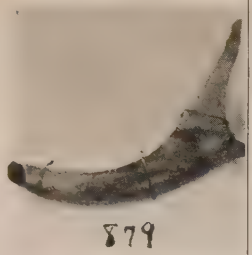
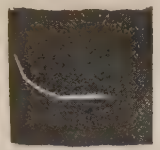
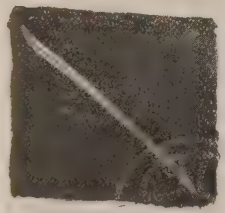
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 814	35 yrs.	Fish bone	Left tonsil						Extraction Cure			About 40 cases of foreign body in the tonsil have been omitted. These were chiefly costal bones of fish and birds, spicules of bones, tooth-brush bristles, and other slender sharp objects.
Fbdy. 817	19 yrs.	Chicken bone	Esophagus just above level crossing left bronchus, 4 days	None	9 mm.	Pathology	Rotation		Extraction Cure	30 sec.	Oral	Rather severe degree of acute esophagitis, not localized particularly to the neighborhood of the foreign body. Fbdy. lodged considerably below usual location of fbdies. in esophagus.

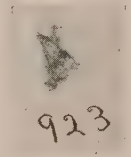
Fbdy. 820  820	37 yrs.	Fish bone	Esophagus, 1 day	None	9 mm.	None	Side-curved	One point	Extraction Cure	2 min. 54 sec.	Oral	Bone had penetrated esophageal wall to a depth of about half the length of bone.
No. 853 No specimen	37 yrs.	Fish bone	Tonsil, 1 day	None					Extraction Cure			
Fbdy. 857 857	72 yrs.	Bone	Esophagus, 3 days	None	9 mm.	Transfixed	Rotation		Extraction Cure	3 min. 40 sec.	Oral	Bone transfixed crosswise with left end perforating deeply into left latero-posterior wall.

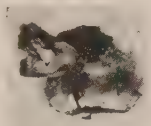
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 861	44 yrs.	Pork bone	Right main bronchus at orifice of upper lobe bronchus, 4 days	Local	9 mm.	Malpresentation	Rotation		Extraction Cure	35 sec.	Oral	Greater transverse diameter of bone was in the anteroposterior plane.
Fbdy. 863 	79 yrs.	Fish bone	Hypopharynx	None					Extraction Cure			
Fbdy. 867 	61 yrs.	Bone	Right middle lobe bronchus obstructing lower lobe bronchus, about 1 year	Local	7 mm.	Pathology from 1 yr. sojourn	Side-curved	Flatwise near end	Extraction Cure	7 min. 40 sec.	Oral	Right main bronchus obstructed almost completely by granulation tissue. After partially removing these with forceps bone came into view stained red by oozing from granulations. Bone soft and friable at edge, turned with its greatest plane sagitally and withdrawn

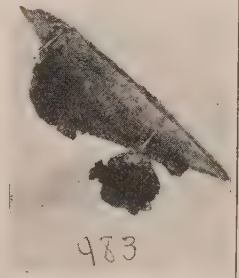
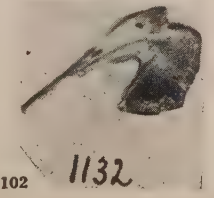
Fbdy. 879  879	56 yrs.	Bone (Duck)	Esophagus below cricopharyngeus, 4 days	None	9 mm.	Sharp pointed foreign body	Rotation	Near one end	Extraction Cure	43 sec.	Oral	Convexity of bone to left, points to right.
Fbdy. 883  883	32 yrs.	Fish bone	Laryngopharynx	None					Extraction Cure			
Fbdy. 895  895	13 yrs.	Fish bone	Left arytenoid eminence	None					Extraction Cure		Oral	

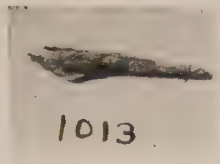
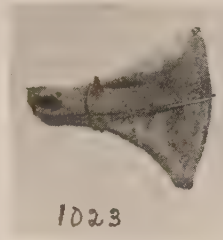
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 902	37 yrs.	Beef bone	Esophagus below cricopharyngeus, 14 days	Local to pharynx	9 mm.	Bone firmly wedged	Rotation	Flatwise	Extraction Cure	1 min. 20 sec.	Oral	Bone quadrangular and quite thick. Localized esophagitis.
No. 910 No specimen	41 yrs.	Fish bone	Right tonsil	None					Extraction Cure		Oral	
Fbdy. 923 	31 yrs.	Fish bone	Right tonsil	None					Extraction Cure		Oral	
No. 938 No specimen	36 yrs.	Fish bone	Glossoepiglottic sulcus	None					Extraction Cure		Oral	

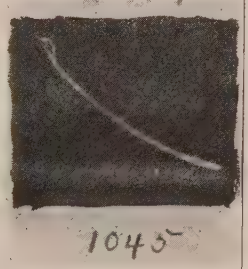
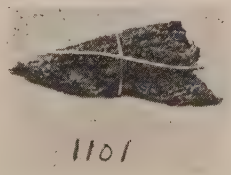
Fbdy. 970	3 yrs.	Chicken bone	Subglottic trachea, 14 days	None			Alligator	Flatwise	Extraction Cure	44 sec.	Oral	Intense laryngitis with swelling of ventricular bands and cords. Granulations visible anteriorly and posteriorly close to the bone on deep inspiration. Bone found in the sagittal plane just far enough below the cords to permit of the cords closing so that the bone was visible only on inspiration. It did not prevent approximation and contact of cords with each other. Fbdy. seized on inspiration. The infective laryngitis due to erosion of the mucosa by the roughened edges of the bone was rapidly increasing the obstruction.
Fbdy. 982 	70 yrs.	Portion oyster shell	Esophagus, 4 days	None	10 mm.	Swollen esophageal folds	Side-curved		Extraction	5 min. 50 sec.	Oral	Fbdy. found at 27 cm. from upper alveolus Esophagoscopy shows stenosis of the esophagus covered with normal mucosa; lumen of narrowing will not admit 10 mm. esophagoscope (normal adult size). Slight dilatation above the narrowing. The dilatation suggests a probability of the narrowing having been present for a long time; the narrowing is at the arch of the aorta, the pulsations of which are quite noticeable but not more so than would be expected in a man of this age and type. The piece of oyster shell of this size probably would not lodge in a perfectly normal esophagus.

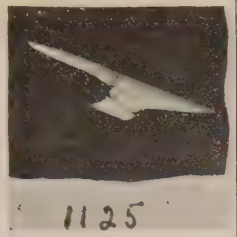
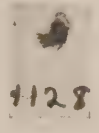
BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 983 	46 yrs.	Beef bone	Esophagus below cricopharyngeus, 2 days	None	9 mm.	Transfixed sharp, rough fbdy.	Rotation	Left end	Extraction Cure	9 min. 25 sec.	Oral	Bone transfixed crosswise.
Fbdy. 987	49 yrs.	Chicken bone	Esophagus just below cricopharyngeal fold, 1 day	None		Sharp edges	Rotation	Right end	Extraction Cure	1 min. 47 sec.	Oral	Bone found with the edge presenting, the greater plane of the bone being in the coronal plane of the body.
Fbdy. 1132 	26 yrs.	Fish bone	Esophagus at level of first thoracic vertebra, 1 day	None	9 mm.	Point buried	Side-curved	Sharp end after freeing	Extraction Cure	4 min. 10 sec.	Oral	Slight laceration of esophageal wall at point of lodgment. Sharp end of bone embedded slightly in right lateral wall.

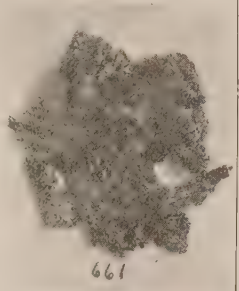
Fbdy. 1155	55 yrs.	Chicken bone	Esophagus below cricopharyngeus, 7 days	None	Forbes speculum	Bone transfixed crosswise	Laryngeal grasping		Extraction Cure	2 min. 55 sec.	Oral	
Fbdy. 1013 	55 yrs.	Veal bone	Esophagus just below cricopharyngeus, 2 days	None	Esophageal speculum	Transfixed; points buried	Plain	Slender end	Extraction Cure	1 min. 57 sec.	Oral	Bone, slender, about 3 cm. long, transfixed lengthwise.
Fbdy. 1023 	29 yrs.	Chicken bone	Esophagus below crossing of left bronchus, 2 days	None	9 mm.	Presentation; avoidance of trauma	Plain	Flatwise covering sharp point	Extraction Cure	1 min. 20 sec.	Oral	Greater plane of bone in coronal plane.

BONES—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1045 	27 yrs.	Fish bone	Esophagus	None	Esophageal speculum	Presentation	Side-curved	As presented	Extraction Cure		Oral	
Fbdy. 1087	44 yrs.	Pork bone	Esophagus below cricopharyngeus, 2 days	None	Esophageal speculum	Buried point	Rotation	Near buried point	Extraction Cure	15 min. 5 sec.	Oral	About one cm. of pointed end buried in posterior wall.
Fbdy. 1101 	44 yrs.	Beef bone	Esophagus below cricopharyngeal fold, 1 week	None			Side-curved	By one pointed end	Extraction Cure	4 min. 30 sec.	Oral	Long axis of bone cross-wise, point perforating right wall.

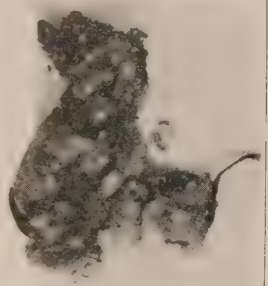
Fbdy. 1125  	35 yrs.	Chicken bone	Esophagus at level of crossing of left bronchus, 1 day	None	9 mm.	Crosswise fixation; buried point; avoidance of trauma	Rotation	Free end	Extraction Cure	2 min. 7 sec.	Oral	Bone lodged long axis crosswise; end to right perforating mucous membrane, end to left in contact but not perforating esophageal wall.
Fbdy. 1128  	27 yrs.	Bone	Left pleural cavity	None	Pleuroscope (7 mm. retrograde gastroscope)				Extraction		Pleural fistula (pleuroscopy)	Small spicule of bone removed from pleural cavity during pleuroscopy for examination. Patient had a portion of projectile in left lung. See fbdy. No. 1131.

MEAT

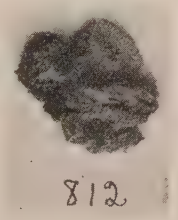
Fbdy. 661  	71 yrs.	Meat	Esophagus at cricopharyngeal constriction	None	Esophageal speculum	None	Fenestrated		Extraction Cure		Oral	

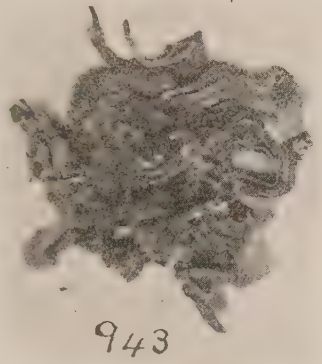
MEAT—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 672	66 yrs.	Meat	Esophagus below cricopharyngeal fold, 6 hours	None	Long esophageal speculum	Friable	Side-curved		Extraction Cure	5 min.	Oral	
Fbdy. 688	40 yrs.	Meat	Esophagus both above and below cricopharyngeus, 12 hours	None	Esophageal speculum	Friable	Alligator		Extraction Cure		Oral	Meat found embedded in an old ulcerated infiltration. Bleeding from granulation tissue.

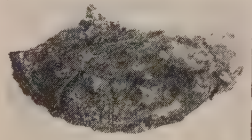
Fbdy. 765 765	64 yrs	Meat	In malignant stenosis of esophagus	None	9 mm.	Friable	Side-curved				Oral	Removed during esophagoscopy for diagnosis.
Fbdy. 808  808	12 yrs.	Bolus Meat	In old stricture of esophagus, 1 day	None	7 mm.	Meat soft and friable	Side-curved		Extraction Cure	1 min. 2 sec.	Oral	Upper portion of mass of meat very soft and friable. This was removed first and then a good grasp was obtained on a tougher portion which came away in one portion measuring about 2 cm. in diameter by 7 cm. in length.
Fbdy. 811 811	68 yrs.	Meat	In malignant stenosis of esophagus	None	9 mm.	None	Side-curved		Extraction Relief		Oral	Removed during esophagoscopy for diagnosis.

MEAT—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 812 	27 yrs.	Meat	Esophagus	None	10 mm.	None	Side-curved		Extraction Relief		Oral	Case of preventriculosis.
No. 821 No specimen	10 yrs.	Meat	In old stricture of esophagus, 3 days	None	7 mm.	Foreign body in tight stricture			Foreign body pushed into stomach esophagoscopically	5 min. 31 sec.		History of swallowing lye at 2 years of age. Intense esophagitis. Old chronic inflammation; engorged vessels crossing scar tissue; small erosions over large surface. Lumen of stricture readily admits No. 12 esophagoscopic bougie but tightens on 14, and No. 16 is gripped very tightly.
Fbdy. 826	52 yrs.	Meat	Esophageal diverticulum	None	9 mm.	None	Side-curved		Extraction		Oral	Case of diverticulum. Removed during esophagoscopy for diagnosis.

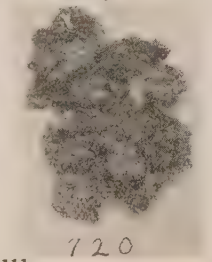
Fbdy. 845	54 yrs.	Meat	In malignant stenosis of esophagus	None	9 mm.	None	Side-curved		Extraction			Removed during esophagoscopy for diagnosis but removal afforded relief.
Fbdy. 943 	25 yrs.	Meat	In old stricture of esophagus	None		Foreign body in tight stricture	Side-curved		Extraction		Oral	Meat impacted in stricture of esophagus, at crossing of left bronchus.
Fbdy. 1001		Meat	Esophagus	None	7 mm.	None	Side-curved		Extraction Relief	14 min. 17 sec.		Mass of stringy fibres of ham found impacted tightly in the grasp of the esophageal wall at the hiatus. Part of fibres were removed and the other part passed through the abdominal esophagus ahead of the esophagoscope.

MEAT—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1012	46 yrs.	Meat	Esophagus, at suprasternal notch, 2 days	None	Esophageal speculum	Pulpy friable foreign body without cohesion	Meat	Presenting part; numerous seizures	Extraction Cure	12 min. 37 sec.	Oral	Marked narrowing of esophageal lumen at level of suprasternal notch.
Fbdy. 1025	41 yrs.	Meat	Esophagus, below cricopharyngeus, 1 day	None	Esophageal speculum	Pulpy friable foreign body without cohesion	Plain	Presenting part	Extraction Cure	3 min. 3 sec.	Oral	After removal of meat, esophagoscope passes at very tight fit through the cervical esophagus into stomach. No scars visible.
Fbdy. 1036 	54 yrs.	Meat	Esophagus in cancerous stenosis	None	9 mm.	None	Side-curved	Presenting part	Extraction Relief		Oral	

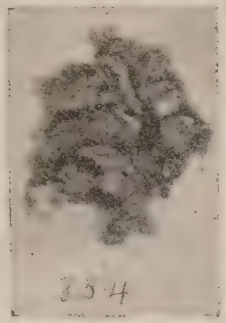
No. 1052 No specimen		Meat	Esophagus (stricture)	None	7 mm.		Side-curved	Presenting part	Extraction Relief	5 min. 5 sec.	Oral	Mass of soft pulp found "corking" the lumen of the stricture. Severe degree of esophagitis throughout all region of stricture.

FOOD

Fbdy. 698 	4 yrs.	Chewing gum	Strictured esophagus (old lesion)	None	7 mm.	None	Plain		Extraction Cure		Oral	
Fbdy. 700 	4 yrs.	Particles food	Strictured esophagus (old lesion)	None	7 mm.	None	Plain		Extraction Cure	48 sec.	Oral	Intense esophagitis localized in neighborhood of stricture.
Fbdy. 720  	4 yrs.	Dry custard	Strictured esophagus (old lesion)	None		None	Side-curved		Extraction Cure		Oral	

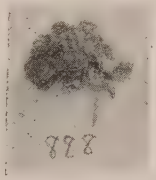
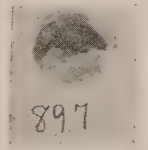
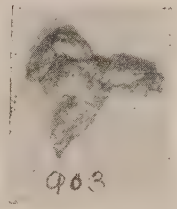
FOOD—*Continued*

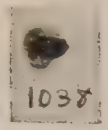
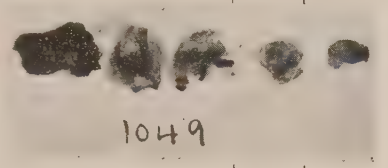
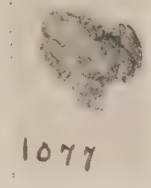
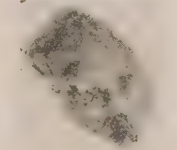
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 795	59 yrs.	Bolus of food; meat, cucumber seeds, lettuce, onion	Esophagus 4 cm. below crossing of upper lobe bronchus	None	10 mm. gastroscope	Exceedingly friable condition of meat	Side-curved and meat		Extraction Cure	1 hr. 25 min	Oral	Fbdy. continued to come away in shreds and fragments until finally a tendonous portion was uncovered and seized. No lesion of esophagus visible to account for the lodgment except that the esophagus is dilated to about twice its normal diameter at the localization of the foreign body. Imperfect mastication, many teeth absent.

Fbdy. 804	65 yrs.	Three peas	In malignant stenosis of esophagus	None			Side-curved and meat		Extraction Cure of fbdy. obstruction			Removed during esophagoscopy for diagnosis but removal afforded relief
Fbdy. 854 	47 yrs.	Portions fish	In old stricture of esophagus, 3 days	None	7 mm.		Side-curved and meat		Extraction Cure	29 min. 55 sec.	Oral	Fish found in cicatricial channel packed tightly in a column about 4 cm. deep. After removal of the fish, 7 mm. esophagoscope was insinuated without difficulty thru the cicatricial canal. Just above it was a large, white, pitted scar looking like a vaccination scar, extending about 2 cm. laterally and about 5 cm. upward and downward.
Fbdy. 858	4 yrs.	Pieces orange skin	In strictured esophagus	None		Finding fbdies. in folds and cicatricies			Extraction Relief	2 min. 48 sec.	Oral	Congenital stricture.

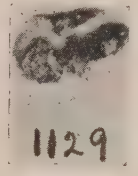
Note: In all cases of foreign body in a strictured lumen the patient was discharged cured of the foreign body obstruction; but in many cases the word "cure" was omitted from the records because of the organic condition.

FOOD—*Continued*

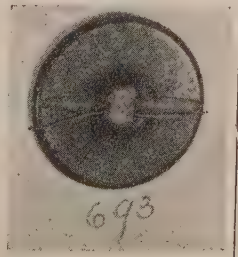
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 888 	6 mos.	Meat	In strictured esophagus	None		Finding fbdy. in folds and cicatricies			Extraction	3 min. 35 sec.	Oral	
Fbdy. 897 	22 mos.	Food	In strictured esophagus	None		Finding fbdy. in folds and cicatricies			Extraction	2 min. 5 sec.	Oral	
Fbdy. 903 	2 yrs.	Paper or fabric	In strictured esophagus	None		Finding fbdy. in strictured lumen			Extraction	1 min. 50 sec.	Oral	
Fbdy. 908	2½ yrs.	Piece orange skin	In strictured esophagus (Congenital stenosis)	None		Finding fbdy. in lumen of narrow stricture			Extraction	1 min. 50 sec.	Oral	Fbdy. found fitted closely in funnel of stricture. No esophagitis. Orange peel was acting intermittently as a check valve.

Fbdy. 1038 	62 yrs.	Food	Esophagus	None	9 mm.	None	Fenestrated		Extraction Relief		Oral	Removed during esophagoscopy for diagnosis (cancer). Relief afforded.
Fbdy. 1049 		Food	Esophagus	None	7 mm.	None	Side-curved		Extraction Relief	3 min. 20 sec.	Oral	Grain of corn and mass of meat found compacted in esophagus just above hiatus. High degree of esophagitis.
Fbdy. 1077 		Food	Esophagus (strictured)	None	7 mm.	None	Side-curved		Extraction Relief	1 min. 25 sec.	Oral	
Fbdy. 1115 	5 yrs.	Orange pulp	Esophagus (strictured)	None	7 mm.	Foreign body located between two strictures	Side-curved		Extraction Relief		Oral	

FOOD—*Continued*

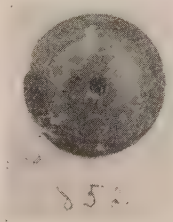
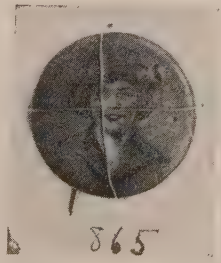
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1129 	22 yrs.	Food	Esophagus middle third, 3 days	None	9 mm.	Pulpy mass lacking cohesion	Side-curved		Extraction	3 min. 10 sec.	Oral	Patient has marked stenosis at point of lodgment. Second lodgment of food.
Fbdy. 1146	5 yrs.	Orange pulp	Esophagus	None	7 mm.	Lodged between two strictures	Side-curved		Extraction	3 min. 4 sec.	Oral	Removed during esophagoscopic bouginage. Case of lye stricture.

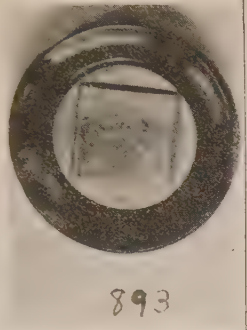
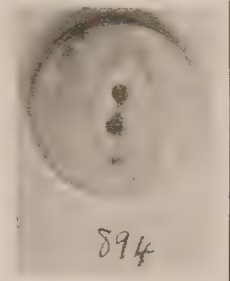
BUTTONS

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 693 	2 yrs.	Button	Esophagus at crossing of left bronchus, 2 days	None	7 mm.	Hard slippery surface	Rotation	Minor axis	Extraction Cure	57 sec.	Oral	

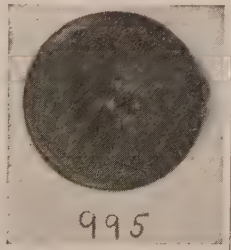
Fbdy. 705	13 mos.	Button	Esophagus below cricopharyngeus border of sternum, 2 days	None	Laryngoscope	Hard slippery surface	Side-curved	Flatwise	Extraction Cure	28 sec.	Oral	Masses of whitish looking food surrounding button which was firmly embedded at the upper thoracic aperture.
Fbdy. 755	14 mos.	Portion button	Right bronchus, 53 days	None	5 mm.	Transfixed and "hooked" at orifice of right upper lobe bronchus	Side-curved	End after version	Extraction Cure	14 min. 18 sec.	Oral	Subglottic tissue much swollen. White object seen in right bronchus, transfixed crosswise at the orifice of the upper lobe bronchus. Traction with forceps demonstrated that the far end must be hooked "around the corner." Manipulation with forceps and lip of tube-mouth finally succeeded in turning foreign body until the hook-shaped end was disengaged and the long axis corresponded to the long axis of the bronchoscope when the foreign body came away easily.
Fbdy. 759	3 yrs.	Button	Esophagus below cricopharyngeus, 20 days	None	Esophageal speculum	Avoidance of false passages	Alligator	Flatwise	Extraction Cure	1 min. 41 sec.	Oral	Blood coming from many lacerations in the esophagus. Severe esophagitis.

BUTTONS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 852 	14 mos.	Button	Esophagus below cricopharyngeus, 14 days	None	7 mm.	Button covered over by folds of edematous esophageal mucosa which required considerable manipulation to uncover button for placement of forceps	Plain	Flatwise	Extraction Cure	3 min. 30 sec.	Oral	Traumatic esophagitis present from which there was free bleeding.
Fbdy. 865 	3 yrs.	Campaign button	Esophagus below cricopharyngeus, 2 days	None	6 mm. Esophageal speculum	Rigid pin, point upward, piercing posterior esophageal wall	Rotation	Left edge to produce version	Extraction Cure	2 min. 4 sec.	Oral	Disc of pin grasped as far to left side as possible and rotated half around to prevent trauma by point. Lip of esophageal speculum used to make side pressure so as to turn button.

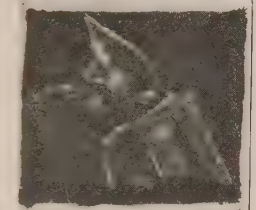
Fbdy. 893 	6 yrs.	Button	Esophagus below cricopharyngeus, 2 days	None	Esophageal speculum (Forbes	Button very tightly wedged; covered with cricopharyngeal fold	Down-jaw	Flatwise	Extraction Cure	1 min. 33 sec.	Oral	
Fbdy. 894 	18 mos.	Button	Esophagus below cricopharyngeus, 8 days	None	Laryngoscope	Button very tightly wedged	Down-jaw	Flatwise	Extraction Cure	1 min. 1 sec.	Oral	
Fbdy. 971	16 mos.	Patent clasp button ("Batchelors")	Esophagus about 2 cm. below cricopharyngeus, about 5 months	None	Laryngoscope	Presentation	Alligator		Extraction Cure	1 min. 35 sec.	Oral	Button found with small end tilted out toward the left anteriorly; large end deeply embedded in folds.

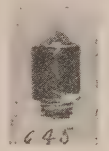
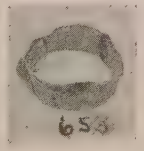
BUTTONS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 989	3 yrs.	Button	Thoracic esophagus at crossing of left bronchus, 9 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 15 sec.	Oral	
Fbdy. 995 	2 yrs.	Button	Esophagus below cricopharyngeus, 23 days	None	7 mm.	Pathology from 23 days' sojourn	Plain	Flatwise	Extraction Cure	3 min. 30 sec.	Oral	Patches of granulation which bled very freely. Button buried in inflammatory folds of esophageal wall.
Fbdy. 996	3 yrs.	Button	Esophagus, 4 months	None	7 mm.	Pathology from 4 months' sojourn	Plain	Flatwise	Extraction Cure	4 min. 55 sec.	Oral	Button hidden by folds of esophageal wall and buried in a swollen mass of edematous tissue.

Fbdy. 1091 1041	14 mos.	Button	Esphagus below cricopharyngeus, 19 days	None	7 mm.	Prevention of dyspnea	Plain	Flatwise	Extraction Cure	8 min.	Oral	Bleeding granulations in the esophagus and at the cricopharyngeal fold. Button embedded in posterior esophageal wall.

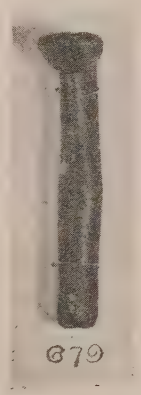
GLASS

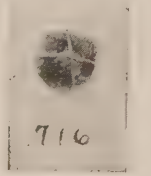
No. 699 No specimen	3 yrs.	Glass lens from flashlight	Esophagus below cricopharyngeus, 3 days	None	7 mm.	Smoothness and shape of fbdy.; lack of resistance below; closeness of fit of walls	Plain		Fbdy. allowed to recede into stomach; recovered in stools	34 min. 39 sec. 24 min. 18 sec.		Right and left walls of esophagus showed granular ulceration at site of lodgment of fbdy.
Fbdy. 818  818	18 mos.	Portion glass breast pump	Esophagus below cricopharyngeus, 14 days	None	7 mm.	Fragile, smooth, hard fbdy. embedded at sharp, cutting edges	Special jaws made to fit fbdy.	Posterior edge to lift out sharp edges	Extraction Cure	6 min.	Oral	Glass found tightly impacted between cricoid and posterior wall surrounded by exuberant granulations which oozed blood, almost black, very freely. Sloughing esophagitis. Child very toxic from sloughing esophagitis.

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
No. 643 No specimen	21 yrs.	Dental Instrument	At upper lobe bronchus, 15 days	Local	9 mm.	Upper lobe bronchus "around the corner"	Upper lobe forceps		Extraction Cure	21 min.	Oral	
Fbdy. 645  645	6 yrs.	Electric bulb from mouth gag	Left bronchus, 6 days	None	5 mm.	Tight impaction	Side-curved	By threaded base	Extraction Cure	1 min. 9 sec.	Oral	Localized bronchitis.
Fbdy. 653  653	43 yrs.	Band of gold crown	Left lower lobe bronchus at orifice of posterior branch, 13 days	Local	9 mm.	None	Side-curved	Both edges of presenting portion	Extraction Cure	1 min. 49 sec.	Oral	Intense laryngitis. Exudate. Granulation tissue.
Fbdy. 666 666	45 yrs.	Dental Instrument	Right inferior lobe bronchus, 10 days	Local	9 mm.	Fbdy. in small branch "around the corner"	Side-curved	Finding in small bronchus	Extraction Cure	10 min. 1 sec.	Oral	Very slight localized bronchitis.

Fbdy. 669	48 yrs.	Portion of tooth plate	Esophagus at level lower margin thyroid cartilage, 1 week	None	9 mm.	Tight impaction; unfavorable presentation	Side-curved	Near one end after version	Extraction Cure	14 min. 39 sec.	Oral	Sloughing esophagitis. Fistula leading backward.
Fbdy. 675	44 yrs.	Gold three-tooth bridge	Right main bronchus at orifice of upper lobe bronchus, 5 days	Local	9 mm.	Necessity for grasping least diameter	Side-curved	Presenting gold band	Extraction Cure	31 sec.	Oral	Localized bronchitis. Pus. Size of fbdy. 3 cm. x 1.5 cm. Circumference 4 cm.

DENTAL AND SURGICAL OBJECTS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 679 	7 yrs.	Intubation tube	Left main bronchus, 18 mos.	None	5 mm.	Hollow object fitting tightly	Mosquito	One blade of forceps inside, other blade outside	Extraction Cure	3 min. 59 sec.	Oral	Mucosa of larynx intensely inflamed, tracheal and bronchial mucosa also. Left bronchial orifice larger than right. Large quantities of foul, pinkish pus removed by sponge pumping. Fbdy. seen at bottom of dilatation of left bronchus.
Fbdy. 683	18 yrs	Dental Instrument	Posterior branch left inferior lobe bronchus, 1 mo. 9 days	None	7 mm.	Small object in small branch bronchus	Side-curved	Point	Extraction Cure	2 min. 2 sec.	Oral	Trachea red and inflammatory in marked contrast to pallor of the pharyngeal mucosa; left bronchus high degree of inflammation with adherent globular masses of thick tough secretion.

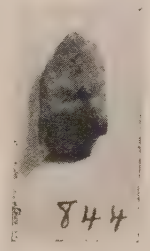
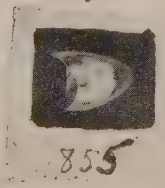
Fbdy. 709	51 yrs.	Portion of tooth	Right lower lobe bronchus, 4½ years	Local	7 mm.	In abscess below fibrous stricture	Side-curved		Extraction	1 hr. 31min 1 hr. 17min. 26 min. 26 min	Oral	Four bronchoscopies done at intervals. Myocardial disease, secondary to pulmonary abscess caused by presence of foreign body.
Fbdy. 716 	49 yrs.	Amalgam tooth filling	Lung tissue of right lower lobe, 7 months	Local	5 mm.	Extreme depth of foreign body in lung tissue	Plain	Over equator	Extraction Cure	41 min. 38 sec. 23 min. 39 sec.	Oral	Lower lobe bronchus in tensely inflamed. Pus coming up from small median branch.

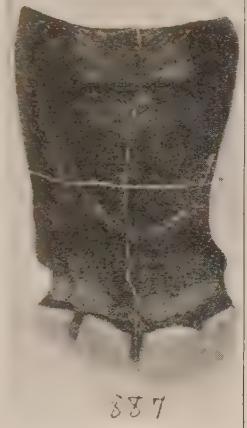
DENTAL AND SURGICAL OBJECTS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 753	14 yrs.	Tooth	Right main bronchus, 23 days	None	7 mm.	Abscess			Extraction Cure	9 min. 49 sec.	Oral	Right main bronchus swollen almost shut; outline eliptical; axis from 10 to 4 o'clock; walls collapsed to contact during expiration, opening again during inspiration. Middle lobe bronchial orifice completely closed by swelling and compression of the tooth; tooth found, crown upward, in stem bronchus, the top of the crown being flush with the spur between the middle lobe bronchial orifice and inferior lobe bronchial orifice. As soon as tooth was disturbed by sponging away the blood-stained secretion, large quantities of pinkish pus were liberated, the pus having the same foul odor noted on the breath at the start of bronchoscopy.
Fbdy. 757	8 yrs.	Portion tracheotomy tube	Trachea, 2 days	None	6 mm.	Hollow object	Side-curved by edge	One jaw inside, other outside, of end	Extraction Cure	1 min. 17 sec.	Oral	Patient wearing tracheotomy tube for papilloma 2 years, without changing. At bronchoscopy larynx found perfectly patulous. No sign of papillomata anywhere. Mucosa of larynx in subglottic region normal. Lumen normal. Upper end of cannula seen in trachea. No bubbling to indicate the passage of air through the cannula. Ragged edge of foreign body drawn into tube mouth to protect the tissues during withdrawal.

Fbdy. 773 773	45 yrs.	Portion tooth plate	Left main bronchus, 4 months	Local	7 mm.	None	Side-curved	Flatwise	Extraction Cure	26 sec.	Oral	Foreign body lying free in left bronchus above orifice of upper lobe bronchus. Slight degree of localized reaction only. Right bronchus and trachea looked normal.
Fbdy. 840 840	31 yrs.	Root of tooth	Right stem bronchus, below largest posterior branch	Local	7 mm.	Acute inflammatory stenosis	Side-curved	Presenting portion	Extraction Cure	18 min. 7 sec.	Oral	Trachea and carina inflamed with patchy red color; right stem bronchus below upper lobe bronchus very red and the mucosa swollen; granulations filled stem bronchus below middle lobe bronchus. Right inferior lobe bronchus bronchiectatic. Considerable quantities of pus and blood kept constantly coming up from the inferior lobe branch bronchi. Odor of breath and pus characteristically saprophytic but not quite so foul as in most foreign body cases of prolonged sojourn.

DENTAL AND SURGICAL OBJECTS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 844 	22 yrs.	Tooth	Branch of the right inferior lobe bronchus, 51 days	Local	7 mm.	Abscess	Plain	Presenting end	Extraction Cure		Oral	*First attempt*: One branch of middle lobe bronchus and one branch of inferior lobe bronchus swollen shut. The small lumen was filled with pus in each case. Both swollen bronchial orifices were dilated with forceps used during expansion. The orifice of both bronchi contained granulations, and in the middle lobe bronchus there was a hard substance palpable with the forceps but it was not free to move. Time: 34 min. 27 sec. *Second attempt*: Orifice of branch of middle lobe bronchus seemed to be normal. In the inferior lobe bronchus, the anterior branch which before was seen to be swollen shut, was more patulous though occupied by granulation tissue. This was removed and the orifice dilated with forceps. Tooth found with one end presenting; this was seized and tooth found to be freely movable and came away on very gentle traction. 6 min. 25 sec.
Fbdy. 855 	63 yrs.	Gold crown	Right lower lobe bronchus, 12 days	Local	7 mm.	Rough sharp edge of open end upward	Plain	Conoidal end after version	Extraction Cure	27 min. 55 sec.	Oral	Unfavorable presentation converted to favorable one by version.

Fbdy. 882	30 yrs.	Gold crown	Right main bronchus at orifice of middle lobe bronchus, 2 days	Local	9 mm.	Tight impaction. Version required	Side-curved	Outside of band after version	Extraction Cure	1 min 1 sec.	Oral	Mucosa of entire tracheobronchial tree much reddened. No granulations present. Some mucopus.
Fbdy. 887 	28 yrs.	Tooth plate	Esophagus, 7 days	None	9 mm.	Version required	Plain	One end after version	Extraction Cure	2 min. 11 sec.	Oral	No trauma of esophagus. No reaction around tooth plate.
Fbdy. 901	7 yrs.	Spring catch from tonsil grasping forceps	Right lower lobe bronchus, 18 days	None	5 mm.	Barb-like points preventing withdrawal	Side-curved	Presenting end	Extraction Cure	24 min. 16 sec.	Oral	Barbs protected by tube-mouth during withdrawal

DENTAL AND SURGICAL OBJECTS—*Continued*

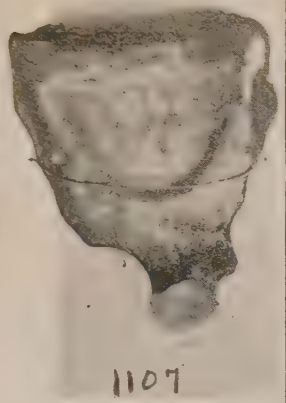
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
No. 934 No specimen	27 yrs.	Tooth plate	Esophagus, 22 days	None	9 mm.	Unfavorable presentation. Two upward projecting points			Guided into stomach. Cure	27 min. 24 sec.		Subsequent x-ray studies show no sign of foreign body in gastro-intestinal tract.
Fbdy. 937 	24 yrs.	Tooth plate	Esophagus, 3 days	None	9 mm.	Two upward projecting points	Side-curved	One point after removal of other point	Extraction Cure	3 min. 9 sec.	Oral	Point broken off with side-curved forceps to permit version.
No. 965 No specimen	51 yrs.	Partial tooth plate	Esophagus below cricopharyngeus, 19 days	None	Short esophagoscope	Firm impaction	Rotation	By one "end" after version	Extraction Cure	4 min. 45 sec.	Oral	Unfavorable presentation required version.
Fbdy. 966 	29 yrs.	Tooth	Right stem bronchus, 8 months	Local		Firm impaction; only one forceps space; other one created	Plain		Extraction Cure	2 min. 55 sec.	Oral	Large mass of granulation tissue in right stem bronchus just below the orifice of the middle lobe bronchus. Bronchial wall stenosed apparently by perichondritis, the proximal swelling being quite firm.

Fbdy. 978

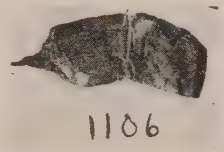
50 yrs.	Surgical drain	Pleural cavity, 2 days	None	Retrograde esophagoscope used as a pleuroscope		Side-curved	End	Extraction	2 min.		Drain found about four inches from skin surface in a clean pocketed-off portion of the pleural cavity. After removal of fbdy. pleuroscope again inserted and cavity inspected but not thoroughly explored. The interior so far as seen was perfectly healthy and free from adhesions except those that formed the boundaries of the cavity. Granulations were nowhere visible in the explored region.

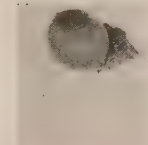
DENTAL AND SURGICAL OBJECTS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1032	34 yrs.	Tooth plate	Esophagus just below cricopharyngeus	None	9 mm.	Required version	Rotation	By left prong	Extraction Cure	2 min. 8 sec.	Oral	
Fbdy. 1074	24 yrs.	Tooth plate	In hypopharynx, lower portion projecting below cricopharyngeus into esophagus	None	Forbes	Two hooks embedded, one in pharyngeal wall, one in esophageal wall, opposite directions	Rotation		Extraction Cure	1 min. 5 sec.	Oral	Ruthless withdrawal would have inflicted serious, possibly fatal trauma.

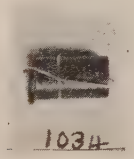
Fbdy. 1107  1107	42 yrs.	Tooth plate	Esophagus below cricopharyngeus	None	Forbes	Required version	Rotation	Apex after version	Extraction Cure	2 min. 50 sec.	Oral	
Fbdy. 1130 1130	18 yrs.	Tooth-plate brace	Esophagus above suprasternal notch	None	Forbes	Required partial version	Mathieu	By left prong	Extraction Cure	3 min. 56 sec	Oral	
Fbdy. 1094 1094	10 yrs.	Portion of wire dental brace	Lying across pharynx immediately behind epiglottis	None	None	Prevention of escape downward	Angular	By irregular end	Extraction Cure		Oral	

DENTAL AND SURGICAL OBJECTS—*Continued*

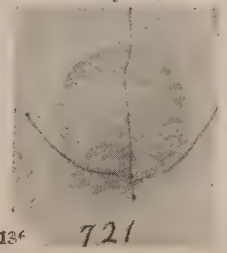
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1106  1106	17 yrs.	Dental brace	Left stem bronchus below orifice of upper lobe	Local	7 mm.	Sharply pointed; transfixed	Plain	Sharp point	Extraction Cure	7 min. 14 sec.	Oral	
Fbdy. 1121 1121	12 yrs.	Tooth	Right stem bronchus, 3 months	None	6 mm.	Pathology; absence of forceps spaces	Plain	Antero-posterior diameter	Extraction Cure	13 min. 56 sec.	Oral	
Fbdy. 1136 1136	29 yrs.	Tooth	Right stem bronchus below orifice of middle lobe, 66 days	Local	8 mm.	Pathology; absence of forceps spaces	Plain	Near one end	Extraction Cure	58 sec.	Oral	
Fbdy. 1153 1153	20 yrs.	Tooth filling	Left inferior lobe bronchus, 3 mos.	Local	7 mm. aspirating	Presentation in granulations and pus	Side-curved	Flatwise	Extraction Cure	2 min. 15 sec.	Oral	Granulations in inferior lobe bronchus at orifice of left upper lobe bronchus.

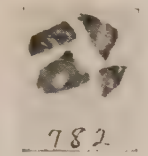
Fbdy 841	6 yrs.	Cartridge blank	Left lower lobe bronchus, 12 days	None	7 mm.	No forceps spaces; proximal annular edematous stenosis	Specially formed hook, then plain forceps	Periphery after withdrawal to location above annular edema	Extraction Cure	20 min. 35 sec. 18 min. 33 sec.	Oral	Cartridge in left main bronchus with marked ring of swelling proximally, hiding all of the end of primer except central portion which is seen to be indented.
Fbdy. 876	17 yrs.	Bullet (Penetrating gunshot)	In lung tissue of right lower lobe, 1 yr. 4 mos.	Local		Bullet in lung tissue, not in bronchus; anterior to bronchus, the bronchial wall intervening; penetrating the intervening tissues, the avoidance of blood vessels, and the freeing of bullet from cicatricial cord in track of penetration of bullet		Heavy, plain	Extraction Cure	36 min. 51 sec. 35 min.		Bullet had entered by penetration through chest wall. First bronchoscopy for localization. Radiographs taken with instruments in position and also with bismuth insufflated to determine relation of bullet to stem bronchus. Fbdy. removed at second bronchoscopy. No hemorrhage. No elevation of temperature. Discharged cured 6 days later. Wound of entrance in back between 7th and 8th ribs 8 cm. to right of spine.
Fbdy. 925 	10 yrs.	Rifle bullet	Right stem bronchus corking orifice of inferior lobe bronchus, 48 days	None	6 mm.	None	Si le-curved	By stem of bullet casting	Extraction Cure	1 min. 1 sec.	Oral	Great flood of pus from drowned lung "uncorked" by removal of bullet.

AMMUNITION—*Continued*

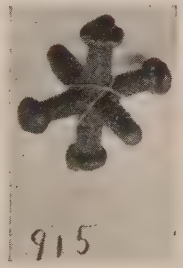
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1034 	9 yrs.	Cartridge shell	Left upper lobe bronchus, 15 days	None	7 mm.	Finding	Plain	By rim	Extraction Cure	14 min. 10 sec.	Oral	Pus coming from left bronchus. After removing this bronchoscope inserted deeply into left bronchus enabled removal of more pus but foreign body not seen. Bronchoscope then inserted into right bronchus which was found normal. Bronchoscope reinserted in left bronchus. Cartridge rim seen projecting from orifice of left upper lobe into lumen of stem bronchus.

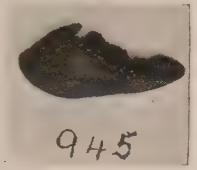
TOYS

Fbdy. 689	3 yrs.	Metal dog	Esophagus below cricopharyngeus, 8 days	None	7 mm.	Four barbed prongs, tail and three legs deeply anchored in esophageal wall.	Side-curved	Hind leg, tail being covered by tube-mouth during withdrawal	Extraction Cure	4 min. 59 sec.	Oral	Cricopharyngeal fold swollen. Just below it large folds of edematous polypoid-looking mucosa. Intense inflammatory reaction. Mucosa bleeding.
Fbdy. 721 	4 mos.	Glass marble	Esophagus below cricopharyngeus, 4 hours	None	7 mm.	Smooth, hard globe	Safety-pin closer used as mechanical spoon		Extraction Cure	4 min. 51 sec.	Oral	

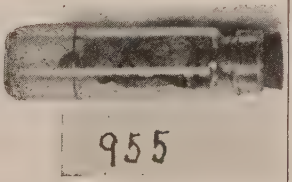
Fbdy. 782  782	15 mos.	Portion glass from Christmas ball	Larynx, 4½ months	None	Laryngoscope	Pathology from 4 months' sojourn. Fragile	Alligator		Extraction Cure	39 sec.	Oral	Piece of glass about 1½ square cm. in area seen on edge precisely in the sagittal plane looking like a white thread. Fragment was broken into three pieces against the laryngoscope after emergence from mouth.
Fbdy. 914 914	4 yrs.	Toy opera glasses	Esophagus below cricopharyngeus, 1 day	None	Esophageal speculum	Presentation	Alligator	Presenting part (one "ocular" end)	Extraction Cure	45 sec.	Oral	

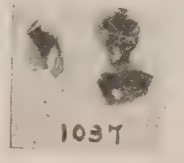
TOYS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 915 	8 yrs.	Toy jack	Mediastinum outside esophageal wall at crossing of left bronchus, 2 months	None	7 mm.	Large many-pointed object impacted below a cicatricial stricture	Cupped	Globular end of one spike	Extraction Ultimate cure	30 min. 3 sec.	Oral	First esophagoscopy: The jackstone is very tightly impacted apparently in the tissue outside the esophageal wall. Only gentle manipulations were attempted and these demonstrated that there was resistance downward as well as upward. There is an ulceration of the esophageal wall about 4 cm. above the present location of the jack. At this point a large flap of mucosa-covered esophageal wall projects out into the lumen of the esophagus, in form like a polypus except for the raw surface which is downward. Jackstone is surrounded by fungations and shreds of lacerated tissue. Second esophagoscopy: Strictured esophagus at crossing of left bronchus. Lobule of tissue projecting into lumen from the right. Stricture dilated. Foreign body gradually moved upward past one obstruction after another. Esophageal ulceration shows no tendency to heal since last inspected. Subsequent history: Atresia of esophagus followed. Gastrostomy done. Lumen restored and perfect swallowing regained with complete cure by retrograde esophagoscopy followed by retrograde bouginage.

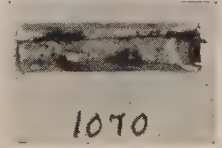
Fbdy. 926	1 yr.	Toy horse	Esophagus below cricopharyngeus, 18 days	None	7 mm.	Anchored by tail and hind leg	Side-curved	Tail and hind leg, alternately	Extraction Cure	6 min. 10 sec.	Oral	Removed by esophagoscopic version.
Fbdy. 945 	5 yrs.	Portion of foot of rubber doll	Right main bronchus, 15 days	None	5 mm.	Impending asphyxia	Side-curved		Extraction Cure	2 min. 46 sec.	Oral	After disimpaction from right main bronchus rubber turned crosswise at bifurcation; plus the pus it occluded the left bronchus completely and the right bronchus being useless because of the pathology of many weeks' duration the child ceased breathing for a period of about one minute before the airway could be restored by tilting the foreign body with the side-curved forceps and with a swab which was passed down into the left lung (the left lung being the unimpaired one).
Fbdy. 947	4 yrs.	Toy plate	Esophagus just below cricopharyngeus, 6 days	None	Esophageal speculum	Large disk with thin rough edges	Down-jaw alligator	Flatwise	Extraction Cure	50 sec.	Oral	Folds of esophageal wall were manipulated away from rough edges of fbdy. with lip of esophageal speculum.

TOYS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 955 	3 yrs.	Piece of crayon	Trachea, 16 days	None	5 mm.	Soft, slippery, waxy nature of fbdy. lacking cohesion (softened by body temperature) and tendency of fbdy. to go into left upper lobe bronchus because of greater air blast into the upper lobe; danger of pushing fragment into lower lobe bronchus	Fenestrated peanut		Extraction Cure		Oral	Tracheotomy required before bronchoscopy to prevent drowning of patient in its purulent secretion. Two portions of crayon removed at subsequent (oral) bronchoscopy. 8 min. 15 sec. Further x-ray study showed portion of fbdy. remaining. Second oral bronchoscopy: Mass of crayon found in orifice of left lower lobe bronchus; left upper lobe bronchus apparently clear of obstruction; on loosening crayon it became fragmentary and secretions were stained the same color as crayon. One day later two other portions of crayon were expelled through tracheotomic cannula.
Fbdy. 963	3 yrs.	Toy jack	Esophagus below cricopharyngeus, 21 days	None	7 mm.	Withdrawal of a fbdy. with six prongs through the folds of the cervical esophagus and the cricopharyngeus	Ball		Extraction Cure	3 min. 45 sec.	Oral	Fbdy. tightly anchored by the cricoid cartilage anteriorly and the cricopharyngeal muscle posteriorly. Siezed with hollow forceps so as to permit some degree of wabbling and thus of working upward through the tightly strictured lumen as the folds were manipulated out of the way with the tube-mouth.

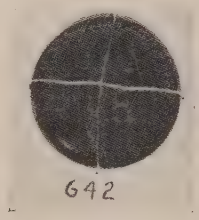
Fbdy. 997	15 mos	Toy jack	Esophagus, 23 days	None	7 mm.	Withdrawal of a 6-pronged object through swollen and lacerated folds	Cupped	One of the knobs	Extraction Cure	9 min. 25 sec.	Oral	Jackstone found buried in pouch filled with bleeding granulation tissue posteriorly and slightly to the right of the true axis of the esophagus.
Fbdy. 999	3 yrs.	Whistle	Esophagus, 38 days	None	7 mm.	Prevention of food and water starvation while waiting for subsidence of the acute traumatic esophageal stenosis	Plain	Flatwise	Extraction Cure	2 min. 21 sec.	Oral	Child was admitted with sucutaneous emphysema, cervical cellulitis, drouling, inability to swallow even a drop of water. Water by constant colonic drop (Murphy method) for 7 days, when ability to swallow liquids was slowly regained. No esophagoscopy done by us until 4 weeks after admission, by which time patient could swallow soft solids. Then esophagoscopy was done and whistle removed. It was found buried in posterior wall with an accumulation of mucus and food above it. No signs of unhealed trauma visible. Cicatrices visible above cricopharyngeal fold on posterior wall. No granulation tissue.
Fbdy. 1037 	3 yrs.	Small Christmas tree ornament	Left bronchus midway between bifurcation and orifice of upper lobe bronchus, 5 days	None	5 mm.	Very friable foreign body	Plain	Flatwise in fragments	Extraction Cure	4 min. 13 sec.	Oral	

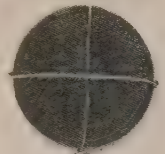
TOYS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1046	6 yrs.	Jackstone	Esophagus, 5 days	None	7 mm.	Prongs buried in lacerated folds	Ball bearing	By one of ball shaped ends	Extraction Death	10 min. 10 sec.	Oral	Jackstone found imbedded in folds below cricopharyngeus. Difficulties of removal increased very much by dyspnea. One of pointed branches of jack continually presenting and version was required to bring up one of the ball-shaped ends. Death four days after removal from abscess of mediastinum following cellulitis of neck.
Fbdy. 1059	4 yrs.	Whistle	Esophagus at suprasternal notch, 12 days	None	Anterior commissure laryngoscope	Presentation	Mosher	Flatwise	Portion extracted; portion passed by by bowel Cure	1 min. 16 sec.	Oral	
Fbdy. 1070 	5 yrs.	Brass reed from horn	Left bronchus 2 cm. below bifurcation, 6 days	None	6 mm.	Tight impaction; mucosa crowded in over edge of foreign body all around its periphery	Mosquito	Edge, one blade inside, other blade outside	Extraction Cure	11 min. 26 sec.	Oral	

Fbdy. 631	3 yrs.	Coin (Quarter)	Esophagus below cricopharyngeus, 2 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min.	Oral	
Fbdy. 632	16 mos.	Coin (Penny)	Larynx, 2 days	None	7 mm.	Avoidance of false passages	Side-curved	Flatwise	Extraction Cure	6 min. 4 sec.	Oral	Esophagus lacerated. Long shreds of mucosa resembling worms. Coin found in larynx. Removed with esophageal forceps after exploring esophagus.
Fbdy. 640	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 8 days	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	28 sec.	Oral	Severe esophagitis.

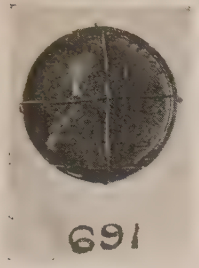
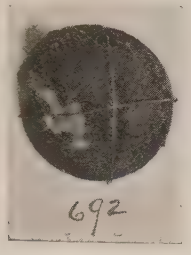
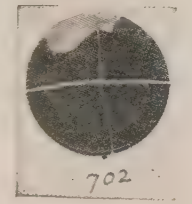
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 642 	2½ yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 3 mos., 13 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	19 sec.	Oral	Ulceration and edema of esophagus.
Fbdy. 649	2 yrs.	Brass disk Medal	Esophagus; upper third, 9 days	None	7 mm.	Tight impaction; esophagitis	Plain	Flatwise	Extraction Cure	41 sec.	Oral	Severe esophagitis. Mucosa eroded at right and left edges. Also slightly anteriorly and posteriorly.
Fbdy. 655	1 yr. 7 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 8 days	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	10 sec.	Oral	Localized esophagitis. Mucopus surrounding coin.

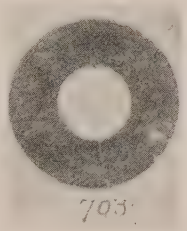
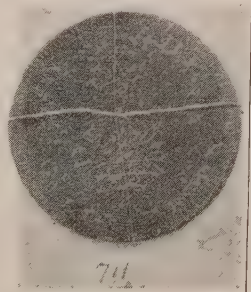
Fbdy. 656 656	18 yrs.	Coin (Half dollar)	Esophagus below cricopharyngeus, 16 hours	None	9 mm.	None	Side-curved	Flatwise	Extraction Cure	18 sec.	Oral	Localized esophagitis.
Fbdy. 657  657	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 8 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	3 min. 7 sec.	Oral	Edematous esophagitis, above penny.
Fbdy. 665 665	1½ yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 4 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 17 sec.	Oral	Localized esophagitis. Coin embedded in folds of esophagus.

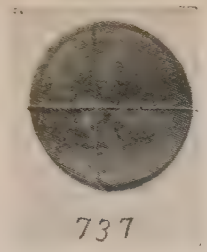
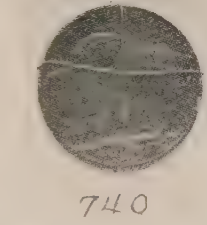
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 671	21 mos.	Coin (Nickel)	Esophagus below cricopharyngeus, 16 days	None		Presentation	Side-curved	Flatwise	Extraction Cure	10 sec.	Oral	Practically no local reaction.
Fbdy. 680	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 2 days	None		Presentation	Plain	Flatwise	Extraction Cure	2 min. 31 sec.	Oral	Localized esophagitis. Small whitish threads in both pyriform sinuses.
Fbdy. 681	11 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 8 days	None		Presentation	Plain	Flatwise	Extraction Cure	21 sec.	Oral	

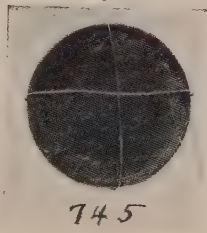
Fbdy. 691 	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 6 days	None	7 mm.	Coin buried in esophageal folds	Plain	Flatwise	Extraction Cure	4 min. 48 sec.	Oral	Edematous esophagitis. Coin buried in mucosa and covered with decomposed solid food.
Fbdy. 692 	1 yr.	Coin (Penny)	Esophagus below cricopharyngeus, 2 months	None	Laryngoscope	Presentation	Plain	Flatwise	Extraction Cure	1 min. 2 sec.	Oral	Folds swollen. Dyspnea during esophagoscopy.
Fbdy. 702 	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 6 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	4 min. 42 sec	Oral	Accumulation of food and gelatinous material above coin.

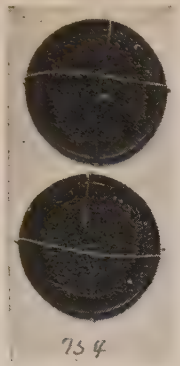
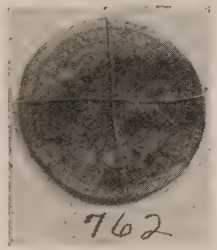
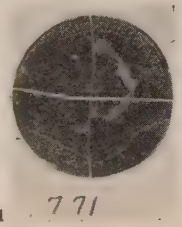
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 703 	3 yrs.	Metal washer	Esophagus below cricopharyngeal fold	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	35 sec.	Oral	Slight localized esophagitis.
Fbdy. 711 	10 yrs.	Brass check	Esophagus below cricopharyngeus, 5 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	2 min. 10 sec.	Oral	Foreign body tightly clasped by esophageal walls.
Fbdy. 730	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 1 week	None	Anterior commissure laryngoscope	Presentation	Plain	Flatwise	Extraction Cure	1 min. 44 sec.	Oral	

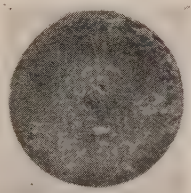
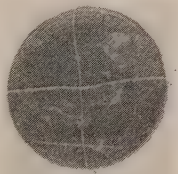
Fbdy. 737  737	3 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 2 days	None	Esophageal speculum	Avoidance of lesions	Plain	Flatwise	Extraction Cure	47 sec.	Oral	Intense esophagitis with numerous abrasions.
Fbdy. 739 739	18 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 4 months	None	Esophageal speculum	Avoidance of false passages	Alligator	Flatwise	Extraction Cure	16 min. 42 sec.	Oral	Fistula in anterior wall of esophagus. Looked dangerous to enter with esophagoscope. Lips were spread with esophageal speculum when upper tip of coin, looking black, was seen. False passage was seen to be split out at the side; it was not a blind false passage.
Fbdy. 740  740	3 yrs.	Coin (Nickel)	Esophagus at crossing of left bronchus, 3 mos.	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 30 sec.	Oral	Coin found in lumen of esophagus covered with detritus and exudate at level of crossing of left bronchus. No sign of traumatism; slight esophagitis just above coin.

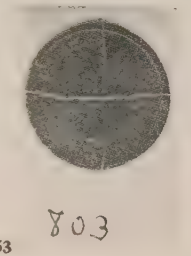
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 744	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 4 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	2 min. 48 sec.	Oral	Penny covered with food and lodged tightly against posterior wall just below cricopharyngeus.
Fbdy. 745 	5 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 5 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	19 sec.	Oral	

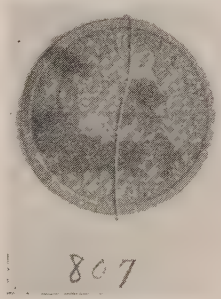
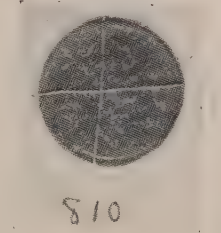
Fbdy. 754 	2 yrs.	Coins (Two pennies)	Esophagus below cricopharyngeal fold, 17 days	None	7 mm.	None	Plain	Flatwise (both coins as as one)	Extraction Cure	16 sec.	Oral	Pharynx bleeding freely. Source of blood not determined except one large surface covered with granulations on the posterior wall.
Fbdy. 762 	7 yrs.	Coin (Quarter)	Esophagus below cricopharyngeus, 5 days	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	44 sec.	Oral	
Fbdy. 771 	3 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 17 days	None	7 mm.	Swollen folds	Side-curved	Flatwise	Extraction Cure	59 sec.	Oral	Coin very much corroded, corrosion being of a dark straw color.

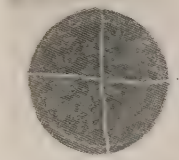
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 780  780	5 yrs.	Tin disc	Esophagus at crossing of left bronchus, about 6 months	None	7 mm.	Ulceration; granulations; swollen folds	Plain	Flatwise	Extraction Cure	1 min. 48 sec.	Oral	Ulceration at both edges where disc was enclosed in anteroposteriorly closing folds on both sides.
Fbdy. 791  741	3 yrs.	Coin (Nickel)	Esophagus just below cricopharyngeus, under the overhanging of cricopharyngeal fold	None	7 mm.	None	Plain	Flatwise	Extraction Cure	35 sec.	Oral	
Fbdy. 796 152 746	21 yrs.	Coin (Quarter)	Esophagus just below cricopharyngeal fold	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	2 min. 41 sec	Oral	Esophagus showed no signs of irritation or reaction.

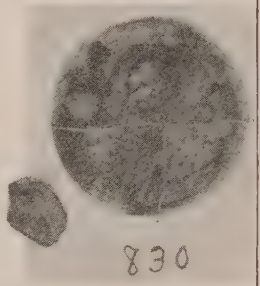
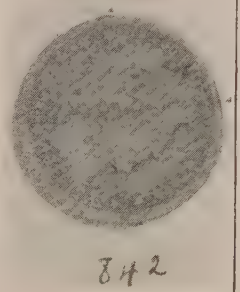
Fbdy. 797	2½ yrs.	Coin (Penny)	Esophagus below cricopharyngeal fold, 21 days	None	7 mm.	Avoidance of false passages already existing	Plain	Flatwise	Extraction Cure		Oral	*First* esophagoscopy. Large perforation of the posterior wall at the level of the upper border of the cricoid cartilage. Pocket looks to be about 2 cm. deep. Sloughs to right of upper edge of pocket. Esophagoscopy not deemed advisable at present. Advise bismuth and calomel to be given dry on tongue for a few days. Time: 2 min. 28 sec. *Second.* Esophagus sloughing. False passage not closed. The gouged out places in the posterior laryngopharyngeal walls still gaping. The edges could not be drawn together sufficiently to make it safe to pass the esophagoscope. Advisable to wait a few days. Time: 3 min. 21 sec. *Third.* Difficulty. Extremely firm pressure on the anterior wall with the esophagoscopic tube-mouth necessary to avoid entering false passage. This anterior pressure interrupted breathing and could only be carried out intermittently in order to give child air between attempts. Coin removed Time: 4 min. 24 sec.
Fbdy. 803 	16 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 11 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 49 sec.	Oral	No trauma in esophagus. No esophagitis.

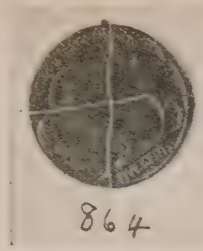
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 807 	3½ yrs.	Coin (Quarter)	Esophagus just below cricopharyngeal fold, 4 days	None	7 mm.	Coin very firmly anchored below cricopharyngeus	Side-curved	Flatwise	Extraction Cure	2 min.	Oral	Coin found embedded below the lower border of cricoid cartilage, firmly anchored. Strong traction was avoided. Coin freed with lip of esophagoscope until it came away readily on very gentle traction.
Fbdy. 810 	2 yrs. 7 mos.	Coin (Penny)	Esophagus below cricopharyngeal fold, 1 week	None	7 mm.	Impaction; swollen folds	Side-curved	Flatwise	Extraction Cure	1 min.	Oral	Coin found jammed below cricoid, hooked under posterior border and hidden by contractions of the cricopharyngeus.

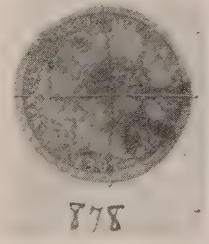
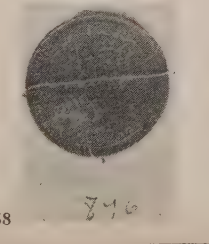
Fbdy. S16 S16	13 yrs.	Coin (Half dollar)	Esophagus just below crico-pharyngeal fold, 1 day	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 12 sec.	Oral	
Fbdy. 829  829	2 yrs.	Coin (Penny)	Esophagus below crossing of left bronchus, 30 days	None	7 mm.	Avoidance of existing false passages	Side-curved	Flatwise	Extraction Cure		Oral	1*st Inspection* esophagus: Hypopharynx in shreds; ulcerations in a number of different locations. Large slit-like perforation on posterior wall. Lifting larynx forward so many sloughs appeared that it was decided best to postpone removal of the coin until esophagitis subsides and adhesions protect the false passages. 2 min. 58 sec. 2*nd Inspection*: Posterior esophageal wall sloughing in two large patches. 1 min. 25 sec. Esophagoscopy. Granulations still visible, the patch being about one cm. by two cm. in size. Penny found in esophagus back of heart below crossing of left bronchus. Fbdy. removed. 2 min. 10 sec.

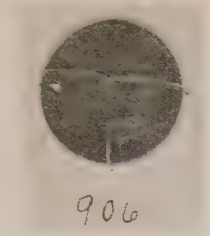
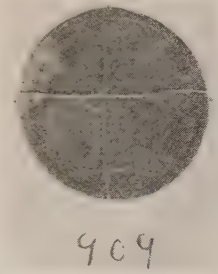
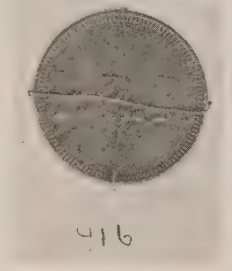
COINS AND OTHER DISKS—*Continued*

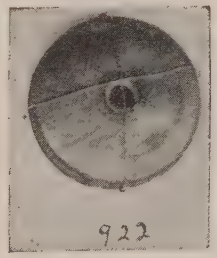
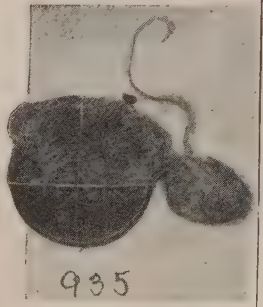
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 830 	2 yrs. 5 mos.	Coin (Quarter)	Esophagus below cricopharyngeal fold, 5 days	None	7 mm.	Obscured by food	Side-curved	Flatwise	Extraction Cure	1 min. 2 sec.	Oral	Foreign body buried in mass of food.
Fbdy. 842 	3 yrs.	Coin (Quarter)	Esophagus below cricopharyngeal fold	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	1 min. 7 sec.	Oral	No local reaction.

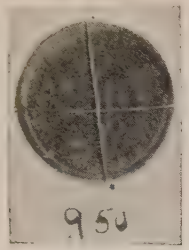
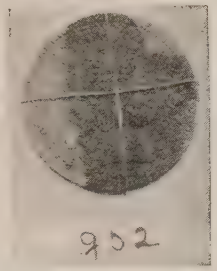
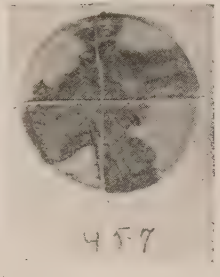
Fbdy. 864 	4 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 9 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 2 sec.	Oral	Coin stained straw color all over.
Fbdy. 866	9 yrs.	Coin (Quarter)	Esophagus below cricopharyngeal fold, 2 weeks	None	7 mm.	Coin impacted deeply in folds of inflammatory tissue	Side-curved	Flatwise	Extraction Cure	2 min.	Oral	
Fbdy. 868	2 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus	None	7 mm.	None	Plain	Flatwise	Extraction Cure	46 sec.	Oral	

COINS AND OTHER DISKS—*Continued*

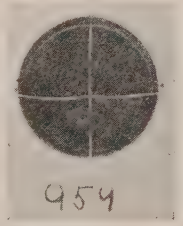
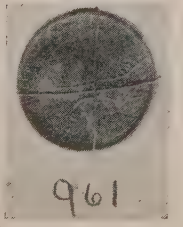
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 878 	5½ yrs.	Coin (Quarter)	Esophagus about 3 cm. below cricopharyngeal fold, 5 days	None	7 mm.		Plain	Flatwise	Extraction Cure	40 sec.	Oral	
Fbdy. 886	4 yrs.	Coin (Quarter)	Esophagus below cricopharyngeal fold, 2 days	None	7 mm.	Obscured by food	Side-curved	Flatwise	Extraction Cure	4 min. 17 sec.	Oral	Quarter very much obscured by mass of food impacted above it.
Fbdy. 896 	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 10 days	None	7 mm.	Presentation	Alligator	Flatwise	Extraction Cure	1 min. 4 sec.	Oral	

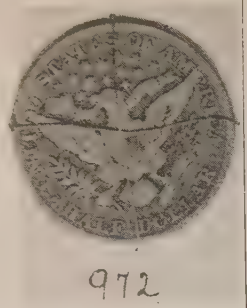
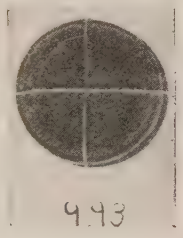
Fbdy. 906 	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeal fold, 1 week	None	7 mm.	Covered by swollen mucosal folds	Alligator	Flatwise	Extraction Cure	2 min. 52 sec.	Oral	
Fbdy. 909 	5 yrs.	Coin (Quarter)	Esophagus below cricopharyngeus	None	7 mm.	Avoidance of false passages and traumatic lesions		Flatwise	Extraction Cure	2 min. 35 sec.	Oral	First esophagoscopy for inspection: excoriations and lacerations of esophagus extending from the cricoid down to the crossing of the left bronchus; coin not seen in any of these lacerated areas. Second esophagoscopy: coin found embedded in swollen mucosa on posterior wall of esophagus below cricopharyngeus; coin surrounded by large area of esophagitis. Removed.
Fbdy. 916 	6 yrs.	P. R. R. brass disc	Esophagus below cricopharyngeal fold, 7 days	None	Esophageal speculum	Presentation	Alligator	Flatwise	Extraction Cure	1 min. 10 sec.	Oral	

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 922 	3 yrs.	Tin whistle	Esophagus below cricopharyngeal fold, 7 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure		Oral	
Fbdy. 935 	2 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 11 days	None	7 mm.	Obscured by food and hair	Side-curved	Flatwise	Extraction Cure	1 min. 22 sec.	Oral	Coin found looking like a greyish mass, thickened, rounded and of irregular shape. On removal the mass that surrounded the coin was discovered to be hair.

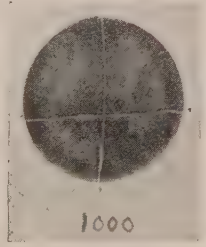
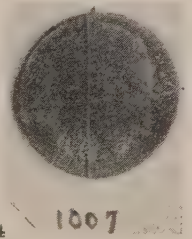
Fbdy. 950 	3 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus muscle, 4 days	None	7 mm.	None	Alligator	Flatwise	Extraction Cure	35 sec.	Oral	
Fbdy. 952 	3 yrs.	Coin (Quarter)	Esophagus below cricopharyngeus, 13 days	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	39 sec.	Orol	Localized esophagitis; fermented food adhering to coin giving it a foul odor. Coin somewhat corroded.
Fbdy. 957 	15 mos.	Coin (Quarter)	Esophagus just below cricopharyngeal fold, 4 days	None	7 mm.	None	Alligator	Flatwise	Extraction Cure	24 sec.	Oral	Coin had a cross stained on it from sulphides. Evidently after being stained in one diameter it had turned nearly 90 degrees and a stain was formed in another diameter.

COINS AND OTHER DISKS—*Continued*

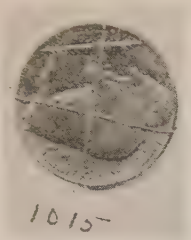
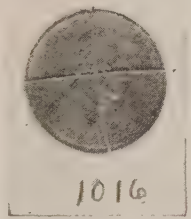
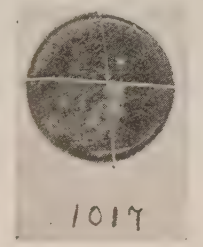
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 959 	15 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 12 days	None	Laryngoscope	Avoidance of lesions	Alligator	Flatwise	Extraction Cure	3 min.	Oral	Intense esophagitis. Slough covering granulating area on posterior wall.
Fbdy. 960	8 yrs.	Coin (Nickel)	Esophagus below cricopharyngeus 2 days	None	7 mm.	None	Side-curved	Flatwise	Extraction Cure	50 sec.	Oral	
Fbdy. 961 	16 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 4 days	None	7 mm.	None	Alligator	Flatwise	Extraction Cure	50 sec.	Oral	

Fbdy. 972 	11 yrs.	Coin (Half dollar)	Esophagus 30 cm. from upper teeth, 1 day	None	7 mm.	Disimpaction and manipulation of obstructing folds during withdrawal	Side-curved	Flatwise	Extraction Cure	6 min.	Oral	
No. 977 No specimen	18 mos.	Coin (Penny)	Esophagus at hiatus esophageus 4 days	None	7 mm.		Plain		Coin escaped downward into stomach; passed	5 min. 55 sec.		Fbdy. doubtless escaped downward during gagging at start of esophagoscopy.
Fbdy. 993 	2 yrs.	Coins (2 pennies)	Esophagus at hiatus esophageus, 1 week	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	1 min. 13 sec.	Oral	Two pennies found stuck together, lodged about 1 cm. above hiatal opening. So far as could be determined hiatal opening did not seem smaller or more tightly contracted than normal.

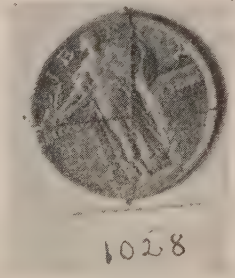
COINS AND OTHER DISKS—*Continued*

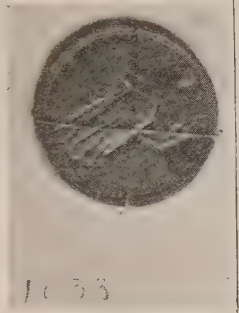
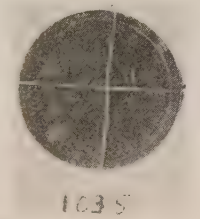
Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 998	2 yrs. 5 mos.	Coin (Penny)	Esophagus below cricopharyngeus, 3 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	3 min. 1 sec.	Oral	
Fbdy. 1000 	2 yrs.	Metal "slug"	Esophagus below cricopharyngeus, 6 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	1 min. 50 sec.	Oral	No irritation of surrounding mucosa.
Fbdy. 1007 	2 yrs.	Coin (Nickel)	Esophagus 1 cm. below cricopharyngeus, 4 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	1 min. 4 sec.	Oral	

Note:. Mention of traumatic lesions from instrumentation by our predecessors in the various cases is omitted because, though they greatly increased our difficulties they were not strictly sequelae of foreign body lodgment.

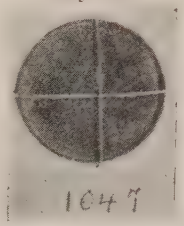
Fbdy. 1015 	2½ yrs.	Coin (Nickel)	Esophagus below cricopharyngeus, 7 days	None	Anterior commissure laryngoscope	Presentation	Forward grasping	Flatwise	Extraction Cure	2 min. 11 sec.	Oral
Fbdy. 1016 	2 yrs.	Coin (Penny)	Esophagus at suprasternal notch, 1 day	None	Anterior commissure laryngoscope	Presentation	Alligator	Flatwise	Extraction Cure	3 min. 30 sec.	Oral
Fbdy. 1017 	16 mos.	Coin (penny)	Esophagus below cricopharyngeus, 3 weeks	None	7 mm.	Foreign body buried in esophageal folds obscured by white pasty material	Forward grasping	Flatwise	Extraction Cure	1 min. 25 sec.	Oral

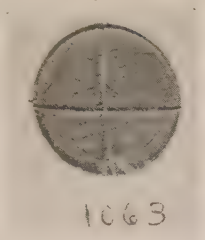
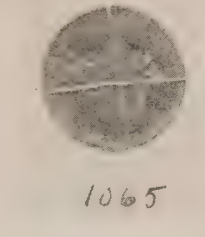
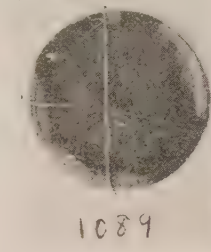
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1027	13 yrs.	Metal disc Dreg cast from lead ladle	Esophagus below cricopharyngeus, 16 days	None	8 mm.	Tightly buried in esophageal folds Enormous size and heavy weight	Plain	Flatwise	Extraction Cure	6 min. 25 sec.	Oral	
Fbdy. 1028 	4½ yrs.	Coin (quarter)	Esophagus, 1 day	None	Anterior commissure laryngoscope	Presentation	Alligator	Flatwise	Extraction Cure	2 min. 20 sec	Oral	

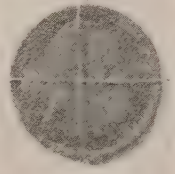
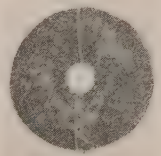
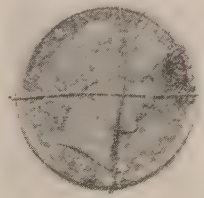
Fbdy. 1029	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 1 day	None		Presentation	Plain	Flatwise	Extraction Cure	1 min. 35 sec.	Oral	
Fbdy. 1033 	6 yrs.	Coin (Penny)	Esophagus at crossing of left bronchus, 2 days	None			Plain	Flatwise	Extraction Cure	3 min. 35 sec.	Oral	
Fbdy. 1035 	3 yrs.	Coin (Nickle)	Esophagus just below cricopharyngeus, 9 days	None	7 mm.	Presentation free of folds	Plain	Flatwise	Extraction Cure	1 min. 9 sec.	Oral	Yellow discoloration on coin.

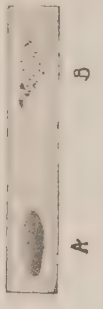
COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1047 	21mos.	Coin (Penny)	Esophagus at crossing of left bronchus, 7 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	2 min. 53 sec.	Oral	Coin darkly corroded, looking brown on presentation.
Fbdy. 1050	3 yrs.	Coin (Nickle)	Esophagus below cricopharyngeal fold, 7 days	None	Anterior commissure laryngoscope	Presentation	Alligator	Flatwise	Extraction Cure	2 min. 42 sec.	Oral	Yellow discoloration.
Fbdy. 1053	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 2 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure		Oral	Coin darkly discolored.

Fbdy. 1063  	13 mos.	Coin (Penny)	Esophagus, 3 days	None	Child's laryngoscope	Presentation	Alligator (Mosher's)	Flatwise	Extraction Cure		Oral	Darkly discolored on central zone.
Fbdy. 1065  	2½ yrs.	Coin (Penny)	Esophagus just below cricopharyngeus, 14 days	None	7 mm.	Presentation	Side-curved	Flatwise	Extraction Cure	26 sec.	Oral	Dark streak of discoloration noted on central zone of coin. Particles of food adherent.
Fbdy. 1089  	2 yrs.	Coin (quarter)	Esophagus just back of heart, 11 days	None	7 mm.	None	Plain	Flatwise	Extraction Cure	2 min. 35 sec.	Oral	Central zone discolored.

COINS AND OTHER DISKS—*Continued*

Case Number and Illustration	Age	Foreign Body	Location	Anesthetic	Tube	Problem	Forceps	Point of Seizure	Result	Time	Route	Comment
Fbdy. 1102  1102	3 yrs.	Coin (Penny)	Esophagus below cricopharyngeus, 25 days	None	7 mm.	Presentation	Plain	Flatwise	Extraction Cure	2 min. 25 sec.	Oral	
Fbdy. 1137  1137	3 yrs.	Disc	Esophagus below cricopharyngeus, 5 days	None	Anterior commissure laryngoscope	Presentation	Rotation	Flatwise	Extraction Cure	2 min. 24 sec.	Oral	
Fbdy. 1149  1149	4 yrs.	Coin (Quarter)	Esophagus	None	7 mm. retrograde	Presentation	Side-curved	Flatwise	Extraction Cure	2 min. 47 sec	Oral	

No. 849 No specimen	5 yrs.	Diphtheritic membrane	Trachea and bronchi	None	5 mm.	Impending asphyxia	Side-curved; also aspirating tube	By presenting part	Extraction Death on way to Municipal Hospital	18 min. 2 sec.	Oral	Bronchoscopy (oral) revealed a somewhat irregular patch of membrane on the intensely swollen subglottic tissue, the membrane projecting in from the left. Trachea intensely inflammatory. Just below the tracheotomic incision the trachea was found to be completely plugged with rounded masses of false membrane which looked just like nasal polypi. On removing this plug two other plugs were seen, the one in the right and the other in the left bronchus. On removal of these, adherent patches of membrane were seen lower down. These deeper membranes were not readily detached. Antitoxin applied. Many similar cases omitted from these tables.
Fbdy. 000  	20 yrs.	Broncholith; silicotic granules	Left lower lobe	Local	7 mm. aspirating	None	Sponge carrier with gauze		Removal; suppuration unimproved	19 min. 42 sec.	Oral	Lung-suppuration of long standing. Bronchoscopy done for diagnosis. Previous diagnosis of bronchiectasis confirmed by this bronchoscopy. Transposition of the lungs.

DISCUSSION.

Dr. H. P. Mosher, Boston: The first part of this paper is a short resume of a very long piece of work, successfully put through, and restricting the sale of lye without proper labelling. Dr. Jackson said it was put through by his friends. Gentlemen, Dr. Jackson has no friends, or not enough to put it through. It was put through entirely by the monumental effort of Dr. Jackson himself and will stand to his credit for all time. The applause has shown that every member of the Society feels as I do about these charts, and hopes that the progress of these charts will not be interrupted. These charts should prove of the very greatest value to the Society and be of the greatest service. Dr. Jackson spoke of the time limit:—the reason for the longer time in some cases was because of type of case and its difficulties. The difference between Dr. Jackson's time and that of other operators is because Dr. Jackson does what we cannot do. He stands in a class by himself. I was pleased to hear Dr. Ellen Patterson conscientionsly record the time she took for the removal of each foreign body. I was glad she said 19 minutes and not 19 seconds. It should not be stressed that Dr. Jackson does these cases in record time, because we other men cannot do the same thing. The number of these cases is overwhelming, it has never been approximated and will never be equalled. The cases have been accumulated during a life time of work and have been accomplished in spite of draw backs which would have stopped the work of most of us here. These have been successfully overcome or combatted. These draw backs have meant loneliness and hard work, have meant coming to the Society for a short time and then going back to get strength to continue this work. Dr. Jackson's work has been one of the finest exhibitions of what we in America call "nerve" that I have ever seen.

Dr. R. C. Lynch, New Orleans, La. There is not much for me to say after Dr. Jackson and Dr. Mosher, but I have been trying to drive in the wedge started by Dr. Jackson, in regard to lye legislation. I am hoping that we shall have similar laws passed in Louisiana to those in Pennsylvania. The tabulation of cases as shown on the screen will be of the greatest help. When we see such work as the disentangling of four safety pins in the esophagus, I think we can congratulate Dr. Jackson for the results of his untiring nerve.

Dr. J. S. Fraser, Edinburgh: I knew about Dr. Jackson's work before coming to America, but it has been a revelation to me to hear the way his colleagues speak about him, almost indeed, as if he were a divinity. I believe rightly so. My assistants in Edinburgh have taken up Dr. Jackson's methods, and remove foreign bodies with much more success than I do by Gruening's method. America is of course a huge country compared to Scotland, but in 15 years Dr. Logan Turner has removed three foreign bodies, and I have removed three. We do not have the peanut problem but we have halfpence. I believe that the reason so few foreign bodies are found is because the cases are not diagnosed. They are called "non-bacillary tuberculosis." I believe if Dr. Jackson's methods were used we should find a good many more cases.

Dr. Jackson (closing) said: In regard to Dr. Mosher's remarks, they remind me of what one says to a mother whose child is going to die. She says to you, "Doctor, you are going to save my child?" and you say "I hope so." I can say the same of Dr. Mosher's kind remarks: I don't believe it, but I hope so. In regard to keeping the time record, the idea is not to see how quickly it can be done, but of seeing that no unnecessary time is lost when the tube is in. The instruments must be ready and handed right over the operator's ear, without losing a second. The patient can stand it if no time is lost, just as one can stand the dentist's drilling, if one knows it is not going to last indefinitely. We work without anesthesia, and we have everything ready before hand, so that the nurse does not have to go and look for things when the tube is in the patient. In regard to overlooking cases—we have had 82 cases in which the foreign body was overlooked from 1 month to 36 years, and notwithstanding all the talking I have done, the profession at large is unaware that a foreign body can be overlooked in such cases.

A vote of thanks was presented to Dr. Jackson for the privilege of publishing the charts illustrating his lecture.

INDEX

(The figures following the abbreviation, Fbdy., denote the Case Record Number, which is placed below the illustration of the corresponding foreign body in the table.)

	Page
Almond kernels: Fbdy. 736	68
Fbdy. 872	66
Fbdy. 973	80
Fbdy. 1042	84
Amalgam tooth filling: Fbdy. 716	127
Ammunition: Bullet, Fbdy. 876	137
bullet, Fbdy. 925	137
cartridge blank, Fbdy. 678	21
cartridge blank, Fbdy. 841	137
cartridge shell, Fbdy. 1034	138
Apple stem: Fbdy. 940	77
artificial dentures (See tooth plates)	
Automobile parts: ball-bearing ball (Ford), Fbdy. 1041	25
vibrator spring (Studebaker), see supplement.	
Ball bearing ball from Ford automobile, Fbdy. 1041	25
Beans: coffee, Fbdy. 833	64
coffee, Fbdy. 1004	81
Fbdy. 738	69
Fbdy. 900	73
Fbdy. 962	79
Fbdy. 1086	85
Fbdy. 1139	89
Beauty pins: Fbdy. 748	28
Fbdy. 1105	30
Beef bones: Fbdy. 729	94
Fbdy. 751	95
Fbdy. 902	102
Fbdy. 983	104
Fbdy. 1101	106
Bones: beef, Fbdy. 729	94
beef, Fbdy. 751	95
beef, Fbdy. 902	102
beef, Fbdy. 983	104
beef, Fbdy. 1101	106
Bones: Fbdy. 639	92
Fbdy. 674	93
Fbdy. 685	93
Fbdy. 760	95
Fbdy. 776	96
Fbdy. 857	99
Fbdy. 867	100
Fbdy. 1128	107
chicken, Fbdy. 667	93
chicken, Fbdy. 706	94
chicken, Fbdy. 817	98
chicken, Fbdy. 970	103
chicken, Fbdy. 987	104
chicken, Fbdy. 1023	105
chicken, Fbdy. 1125	107
chicken, Fbdy. 1155	105
duck, Fbdy. 879	101
fish, Fbdy. 646	92
fish, Fbdy. 714	94
fish, Fbdy. 777	96
fish, Fbdy. 778	96
fish, Fbdy. 779	97
fish, Fbdy. 784	97
fish, Fbdy. 809	97
fish, Fbdy. 814	98
fish, Fbdy. 820	99
fish, Fbdy. 853	99
fish, Fbdy. 863	100
fish, Fbdy. 883	101
fish, Fbdy. 895	101
fish, Fbdy. 910	102
fish, Fbdy. 923	102
fish, Fbdy. 938	102
fish, Fbdy. 1045	106
fish Fbdy. 1132	104

lamb, Fbdy. 638 92
pork, Fbdy. 637 92
pork, Fbdy. 752 95
pork, Fbdy. 861 100
pork, Fbdy. 1087 106
oyster, Fbdy. 982 103
veal, Fbdy. 1013 105
Brass umbrella-headed tacks:
Fbdy. 664 9
Fbdy. 676 9
Fbdy. 677 9
Fbdy. 687 10
Fbdy. 694 10
Fbdy. 707 10
Fbdy. 746 11
Fbdy. 764 11
Fbdy. 917 12
Fbdy. 933 13
Fbdy. 985 14
Fbdy. 1003 14
Fbdy. 1009 25
Fbdy. 1117 27
Fbdy. 1148 27
Bridge, gold three toothed: Fbdy. 675 125
Bronchial casts: Fbdy. 1119 88
Bronchus: almond kernel in, Fbdy. 736 68
almond kernel in, Fbdy. 872 66
almond kernel in, Fbdy. 973 80
almond kernel in, Fbdy. 1042 84
amalgam tooth filling in, Fbdy. 716 127
ball bearing ball in, Fbdy. 1041 25
band from gold crown in, Fbdy. 653 124
bean in, Fbdy. 738 69
bean in, Fbdy. 900 73
bean in, Fbdy. 962 79
bean in, Fbdy. 1068 86
beans in, Fbdy. 1139 89
coffee in, Fbdy. 833 64
coffee in, Fbdy. 1004 81
beauty pins in, Fbdy. 748 28
beauty pins in Fbdy. 1105 30
bridge, gold three tooth in, Fbdy. 675 125
bronchial casts in, Fbdy. 1119 88
bulb, (electric) from mouth gag in, Fbdy. 645 124
burr, cockle in, Fbdy. 723 59
button in, Fbdy. 755 119
collar button in, Fbdy. 718 28
collar button in, Fbdy. 954 29
collar button in, Fbdy. 979 29
collar button in, Fbdy. 1086 30
canna seed in, Fbdy. 976 80
cartridge, blank in, Fbdy. 678 21
cartridge, blank in, Fbdy. 841 137
shell in, Fbdy. 1034 138
casts, bronchial, in, Fbdy. 1119 88
chestnut kernel in, Fbdy. 743 70
cockleburr in, Fbdy. 723 59
coffee bean in, Fbdy. 833 64
coffee bean in, Fbdy. 1004 81
collar button in, Fbdy. 718 28
collar button in, Fbdy. 954 29
collar button in, Fbdy. 979 29
collar button in, Fbdy. 1086 29
common pin in, Fbdy. 662 31
common pin in, Fbdy. 710 31
common pin in, Fbdy. 712 32
common pin in, Fbdy. 733 32
common pin in, Fbdy. 741 33
common pin in, Fbdy. 798 33
common pin in, Fbdy. 835 33
common pin in, Fbdy. 851 34
common pin in, Fbdy. 869 34
common pin in, Fbdy. 912 35
common pin in, Fbdy. 1062 35
common pin in, Fbdy. 1081 36
common pin in, Fbdy. 1097 36
common pin in, Fbdy. 1103 36
common pin in, Fbdy. 1151 37
cork (portion) in, Fbdy. 1133 90
corn (maize) in, Fbdy. 633 57
corn (maize) in, Fbdy. 658 57
corn (maize) in, Fbdy. 783 60
corn (maize) in, Fbdy. 838 65
corn (maize) in, Fbdy. 939 77
corn (maize) in, Fbdy. 948 78
corn (maize) in, Fbdy. 958 79
corn (maize) in, Fbdy. 1072 83
corn (maize) in, Fbdy. 1079 83
corn (maize) in, Fbdy. 1127 84
corn (maize) in, Fbdy. 1152 91
corn (maize) in, Fbdy. 1154 91
corn stalk in, Fbdy. 898 73

dental brace in, Fbdy. 1106 136
dental reamer in, Fbdy. 643 124
dental reamer in, Fbdy. 666 124
dental reamer in, Fbdy. 683 126
desk pin in, Fbdy. 860 34
gold crown in, Fbdy. 855 130
gold crown in, Fbdy. 882 131
three tooth bridge in, Fbdy. 675 125
intubation tube in, Fbdy. 679 126
Job's tear in, Fbdy. 956 78
Job's tear in, Fbdy. 1020 86
lead pipe (portion) in, Fbdy. 843 24
metallic object in, Fbdy. 930 24
nail in, Fbdy. 648 15
nail in, Fbdy. 654 15
nail in, Fbdy. 772 15
nail in, Fbdy. 913 16
nail in, Fbdy. 921 16
nail in, Fbdy. 1104 27
needle, sewing machine in, Fbdy. 831 33
paper fastener in, Fbdy. 968 24
peanut kernel in, Fbdy. 647 57
peanut kernel in, Fbdy. 682 57
peanut kernel in, Fbdy. 696 58
peanut kernel in, Fbdy. 724 68
peanut kernel in, Fbdy. 725 59
peanut kernel in, Fbdy. 750 70
peanut kernel in, Fbdy. 767 71
peanut kernel in, Fbdy. 781 60
peanut kernel in, Fbdy. 787 60
peanut kernel in, Fbdy. 799 61
peanut kernel in, Fbdy. 802 62
peanut kernel in, Fbdy. 815 62
peanut kernel in, Fbdy. 828 64
peanut kernel in, Fbdy. 832 64
peanut kernel in, Fbdy. 846 65
peanut kernel in, Fbdy. 856 65
peanut kernel in, Fbdy. 871 66
peanut kernel in, Fbdy. 872 66
peanut kernel in, Fbdy. 875 67
peanut kernel in, Fbdy. 877 67
peanut kernel in, Fbdy. 880 72
peanut kernel in, Fbdy. 884 72
peanut kernel in, Fbdy. 890 72
peanut kernel in, Fbdy. 904 73
peanut kernel in, Fbdy. 905 74
peanut kernel in, Fbdy. 920 75
peanut kernel in, Fbdy. 932 76
peanut kernel in, Fbdy. 936 76
peanut kernel in, Fbdy. 946 77
peanut kernel in, Fbdy. 964 79
peanut kernel in, Fbdy. 991 81
peanut kernel in, Fbdy. 1019 81
peanut kernel in, Fbdy. 1024 82
peanut kernel in, Fbdy. 1044 82
peanut kernel in, Fbdy. 1096 83
peanut kernel in, Fbdy. 1098 87
peanut kernel in, Fbdy. 1108 82
peanut kernel in, Fbdy. 1118 87
peanut shell in, Fbdy. 800 62
pencil cap in, Fbdy. 1054 25
pencil cap and eraser in, Fbdy. 788 23
pencil ferrule in, Fbdy. 770 22
pork bone in, Fbdy. 861 100
rifle bullet in, Fbdy. 925 137
safety pin in, Fbdy. 660 38
safety pin in, Fbdy. 697 39
safety pin in, Fbdy. 758 42
safety pin in, Fbdy. 768 43
safety pin in, Fbdy. 794 43
safety pin in, Fbdy. 1058 51
safety pin in, Fbdy. 1073 52
safety pin in, Fbdy. 1085 53
safety pin in, Fbdy. 1138 56
screw in, Fbdy. 636 19
screw in, Fbdy. 684 19
screw in, Fbdy. 686 20
screw in, Fbdy. 1011 25
screw in, Fbdy. 1061 26
screw in, Fbdy. 1095 26
sewing machine needle in, Fbdy. 831 33
shawl pin in, Fbdy. 635 31
shawl pin in, Fbdy. 650 31
shawl pin in, Fbdy. 715 32
shawl pin in, Fbdy. 726 32
shawl pin in, Fbdy. 847 34
shawl pin in, Fbdy. 986 35
shawl pin in, Fbdy. 1075 37
spring from tonsil forceps in, Fbdy. 901 131
staple in, Fbdy. 634 17
staple in, Fbdy. 664 19
staple in, Fbdy. 675 18
staple in, Fbdy. 690 17
T-shaped pin in, Fbdy. 860 34

tacks, in, Fbdy. 668 6
tacks, in, Fbdy. 708 7
tacks, in, Fbdy. 728 7
tacks, in, Fbdy. 859 8
tacks, in, Fbdy. 907 8
tacks, in, Fbdy. 941 6
tacks, in, Fbdy. 974 8
tacks, in, Fbdy. 1056 26
tacks, in, Fbdy. 1093 26
brass headed "umbrella," tack in, Fbdy. 664 9
brass headed "umbrella," tack in, Fbdy. 676 9
brass headed "umbrella," tack in, Fbdy. 677 9
brass headed "umbrella," tack in, Fbdy. 687 10
brass headed "umbrella," tack in, Fbdy. 694 10
brass headed "umbrella," tack in, Fbdy. 707 10
brass headed "umbrella," tack in, Fbdy. 746 11
brass headed "umbrella," tack in, Fbdy. 764 11
brass headed "umbrella," tack in, Fbdy. 917 12
brass headed "umbrella," tack in, Fbdy. 933 13
brass headed "umbrella," tack in, Fbdy. 985 14
brass headed "umbrella," tack in, Fbdy. 1003 14
brass headed "umbrella," tack in, Fbdy. 1009 25
brass headed "umbrella," tack in, Fbdy. 1117 27
brass headed "umbrella," tack in, Fbdy. 1148 27
tacks, thumb in, Fbdy. 774 7
tacks, thumb in, Fbdy. 775 7
tooth in, Fbdy. 753 128
tooth in, Fbdy. 844 130
tooth in, Fbdy. 966 132
tooth in, Fbdy. 1121 136
tooth in, Fbdy. 1136 136
tooth filling in, Fbdy. 1153 136
tooth, portion, in, Fbdy. 709 127
tooth plate, portion, in, Fbdy. 773 129
tooth root in, Fbdy. 840 129
umbrella tip in, Fbdy. 659 21
walnut kernel, in, Fbdy. 763 71
watermelon seed in, Fbdy. 719 58
watermelon seed in, Fbdy. 724 59
watermelon seed in, Fbdy. 732 68
watermelon seed in, Fbdy. 819 63
watermelon seed in, Fbdy. 824 63
watermelon seed in, Fbdy. 839 65
watermelon seed in, Fbdy. 1048 86
watermelon seed in, Fbdy. 1090 86
Bulb, electric, from mouth gag in bronchus Fbdy. 645 124
Bullet in bronchus, Fbdy. 876 137
Fbdy. 925 137
Button, campaign, Fbdy. 865 120
collar, Fbdy. 718 28
Fbdy. 954 29
Fbdy. 979 29
Fbdy. 1086 30
patent, "batchelor's" Fbdy. 971 121
plain, skirts, coat, trouser, waistcoat, overall, apron etc, Fbdy. 693 118
Fbdy. 705 119
Fbdy. 755 119
Fbdy. 759 119
Fbdy. 852 120
Fbdy. 893 121
Fbdy. 894 121
Fbdy. 989 122
Fbdy. 995 122
Fbdy. 996 122
Fbdy. 1091 123

Campaign buttons in esophagus, Fbdy. 865 120
Canna seed in bronchus, Fbdy. 976 80
Cartridge blank in bronchus, Fbdy. 678 21
Fbdy. 841 137
Cartridge shell in bronchus, Fbdy. 1034 138
Chestnut kernel in bronchus, Fbdy. 743 70
Fbdy. 832 64
Chicken bones, Fbdy. 667 93
Fbdy. 706 94
Fbdy. 817 98

Fbdy. 970 103
Fbdy. 987 104
Fbdy. 1023 105
Fbdy. 1125 107
Fbdy. 1155 105
Clothing, portion of shirt, Fbdy. 1143 90
Cockle burr, Fbdy. 723 59
Fbdy. 980 80
Coffee beans, Fbdy. 833 64
Fbdy. 1004 81
Coins, half dollar, Fbdy. 656 147
Fbdy. 816 157
Fbdy. 972 165
nickle (five cent piece) Fbdy. 665 147
Fbdy. 671 148
Fbdy. 737 151
Fbdy. 740 152
Fbdy. 745 152
Fbdy. 771 153
Fbdy. 791 154
Fbdy. 864 159
Fbdy. 868 159
Fbdy. 950 163
Fbdy. 960 164
Fbdy. 1007 166
Fbdy. 1015 166
Fbdy. 1035 169
Fbdy. 1050 170
penny, Fbdy. 632 145
Fbdy. 640 145
Fbdy. 642 146
Fbdy. 655 146
Fbdy. 657 147
Fbdy. 681 148
Fbdy. 686 148
Fbdy. 691 149
Fbdy. 692 149
Fbdy. 702 149
Fbdy. 730 150
Fbdy. 739 151
Fbdy. 744 152
Fbdy. 754 153
Fbdy. 797 155
Fbdy. 803 155
Fbdy. 810 156
Fbdy. 829 157
Fbdy. 896 160
Fbdy. 906 160
Fbdy. 935 161
Fbdy. 959 164
Fbdy. 961 164
Fbdy. 977 165
(two agglutinated together) Fbdy. 993 165
Fbdy. 998 165
Fbdy. 1016 167
Fbdy. 1017 167
Fbdy. 1029 169
Fbdy. 1047 170
Fbdy. 1053 170
Fbdy. 1063 171
quarter, Fbdy. 762 153
Fbdy. 796 154
Fbdy. 807 156
Fbdy. 830 158
Fbdy. 842 158
Fbdy. 878 160
Fbdy. 886 160
Fbdy. 909 161
Fbdy. 952 163
Fbdy. 957 163
Fbdy. 1028 168
Fbdy. 1033 169
Fbdy. 1089 171
Collar buttons, Fbdy. 718 28
Fbdy. 954 29
Fbdy. 979 29
Fbdy. 1086 30
Common pins, Fbdy. 662 31
Fbdy. 710 31
Fbdy. 712 32
Fbdy. 733 32
Fbdy. 741 33
Fbdy. 798 33
Fbdy. 835 33
Fbdy. 851 34
Fbdy. 869 34
Fbdy. 912 35
Fbdy. 1062 35
Fbdy. 1081 36
Fbdy. 1097 36
Fbdy. 1103 36
Fbdy. 1151 37
Cork, portion, (bark), Fbdy. 1133 90
Corn (maize) in bronchus, Fbdy. 633 57

Fbdy. 658 57
Fbdy. 783 60
Fbdy. 790 61
Fbdy. 805 62
Fbdy. 822 63
Fbdy. 838 65
Fbdy. 898 73
Fbdy. 931 76
Fbdy. 939 77
Fbdy. 948 78
Fbdy. 949 78
Fbdy. 958 79
Fbdy. 1031 83
Fbdy. 1072 83
Fbdy. 1079 83
Fbdy. 1127 84
Fbdy. 1144 84
Fbdy. 1152 91
Fbdy. 1154 91
Crab shell (crustacean), Fbdy. 1124 89
Crayon, (paraffine and coal tar dye), Fbdy. 955 142

Dental Objects, amalgam tooth filling Fbdy. 716 127
band of gold crown, Fbdy. 653 124
dental instrument (reamer) Fbdy. 643 124
dental instrument (reamer) Fbdy. 666 124
dental instrument (reamer) Fbdy. 683 126
dental brace Fbdy. 1094 135
dental brace, Fbdy. 1106 136
dental brace, Fbdy. 1130 135
dental bridge (gold three tooth) Fbdy. 675 125
gold crown Fbdy. 855 130
gold crown Fbdy. 882 131
tooth plate (artificial denture) Fbdy. 887 131
tooth plate (artificial denture) Fbdy. 934 132
tooth plate (artificial denture) Fbdy. 937 132
tooth plate (artificial denture) Fbdy. 1032 134
tooth plate (artificial denture) Fbdy. 1074 134
tooth plate (artificial denture) Fbdy. 1107 135
tooth plate (partial) Fbdy. 965 132
tooth plate (portion) Fbdy. 669 125
tooth plate (portion) Fbdy. 773 129
tooth, Fbdy. 753 128
tooth, Fbdy. 844 130
tooth, Fbdy. 966 132
tooth, Fbdy. 1121 136
tooth, Fbdy. 1136 136
tooth, (portion) Fbdy. 709 127
tooth, (root) Fbdy. 840 129
tooth filling (amalgam) Fbdy. 716 127
tooth filling (amalgam) Fbdy. 1153 136
Dentures, artificial. (See Tooth plates.)
Discs, brass, Fbdy. 649 146
brass (Pennsylvania Railroad) Fbdy. 916 161
brass, Fbdy. 711 150
disc, Fbdy. 1137 172
metal disc, Fbdy. 1027 168
metal slug, Fbdy. 1000 166
metal washer, Fbdy. 703 150
tin disc, Fbdy. 780 154
Dog (toy) Fbdy. 689 138
Duck bone, Fbdy. 879 101
Egg Shell, Fbdy. 1030 87
Electric bulb from mouth gag, Fbdy. 645 124
Esophagus: bone in, Fbdy. 637 92
Fbdy. 638 92
Fbdy. 639 92
Fbdy. 667 93
Fbdy. 674 93
Fbdy. 685 93
Fbdy. 714 94
Fbdy. 729 94
Fbdy. 751 95
Fbdy. 752 95
Fbdy. 760 95
Fbdy. 776 96
Fbdy. 817 98
Fbdy. 857 99
Fbdy. 879 100
Fbdy. 902 102

Fbdy. 982 103
Fbdy. 983 104
Fbdy. 987 104
Fbdy. 1013 105
Fbdy. 1023 106
Fbdy. 1045 106
Fbdy. 1087 106
Fbdy. 1101 106
Fbdy. 1125 107
Fbdy. 1132 104
Fbdy. 1155 105
button in, Fbdy. 693 118
Fbdy. 705 119
Fbdy. 759 119
Fbdy. 852 120
Fbdy. 893 121
Fbdy. 894 121
Fbdy. 989 122
Fbdy. 995 122
Fbdy. 996 122
Fbdy. 1091 123
button, campaign, in, Fbdy. 865 120
button, collar in, Fbdy. 954 29
Fbdy. 979 29
button, patent clasp, in, Fbdy. 971 121
coin (half-dollar) in, Fbdy. 656 147
Fbdy. 816 157
Fbdy. 972 165
coin, nickle in, Fbdy. 665 147
Fbdy. 671 148
Fbdy. 740 152
Fbdy. 745 152
Fbdy. 771 153
Fbdy. 791 154
Fbdy. 864 159
Fbdy. 868 159
Fbdy. 950 163
Fbdy. 960 164
Fbdy. 1007 166
Fbdy. 1015 166
Fbdy. 1035 169
Fbdy. 1050 170
coin, penny in, Fbdy. 632 145
Fbdy. 640 145
Fbdy. 642 146
Fbdy. 655 146
Fbdy. 657 147
Fbdy. 681 148
Fbdy. 686 148
Fbdy. 691 149
Fbdy. 692 149
Fbdy. 702 149
Fbdy. 730 150
Fbdy. 739 151
Fbdy. 744 152
coin, pennies, (two together) Fbdy. 754 153
coin, penny, in, Fbdy. 797 155
Fbdy. 803 155
Fbdy. 810 156
Fbdy. 829 157
Fbdy. 896 160
Fbdy. 935 161
Fbdy. 959 164
Fbdy. 961 164
Fbdy. 977 165
coin, (two together) in, Fbdy. 993 164
Fbdy. 998 165
Fbdy. 1016 167
Fbdy. 1017 167
Fbdy. 1029 169
Fbdy. 1047 170
Fbdy. 1053 170
Fbdy. 1063 171
coin, quarter, in, Fbdy. 762 153
Fbdy. 796 154
Fbdy. 807 156
Fbdy. 830 158
Fbdy. 842 158
Fbdy. 878 160
Fbdy. 886 160
Fbdy. 909 161
Fbdy. 952 163
Fbdy. 957 163
Fbdy. 1028 168
Fbdy. 1033 169
Fbdy. 1089 171
corn, (fresh) in, Fbdy. 1031 83
crab shell in, Fbdy. 1124 89
disc, brass in, Fbdy. 649 146
Fbdy. 711 150
Fbdy. 916 161
disc in, Fbdy. 1137 172
disc, metal in, Fbdy. 1027 168
disc, metal slug in, Fbdy. 1000 166
disc, tin in, Fbdy. 780 154

dog (toy) in, Fbdy. 689 138
duck bone in, Fbdy. 879 101
egg shell in, Fbdy. 1030 87
food chewing gum in, Fbdy. 698 113
food dry custard in, Fbdy. 720 113
food fish portions in, Fbdy. 854 115
food particles in, Fbdy. 700 113
Fbdy. 795 114
Fbdy. 897 116
Fbdy. 1038 117
Fbdy. 1049 117
Fbdy. 1077 117
Fbdy. 1129 118
food meat in, Fbdy. 661 107
Fbdy. 672 108
Fbdy. 688 103
Fbdy. 765 109
Fbdy. 808 109
Fbdy. 811 109
Fbdy. 812 109
Fbdy. 821 110
Fbdy. 826 110
Fbdy. 845 111
Fbdy. 888 116
Fbdy. 943 111
Fbdy. 1001 111
Fbdy. 1012 112
Fbdy. 1025 112
Fbdy. 1036 112
Fbdy. 1052 113
orange skin in, Fbdy. 858 115
Fbdy. 908 116
orange pulp in, Fbdy. 1115 117
Fbdy. 1146 118
paper or fabric in, Fbdy. 903 116
peas (three) in, Fbdy. 804 115
glass from breast pump in, Fbdy. 818 123
glass lens in, Fbdy. 699 123
glass marble in, Fbdy. 721 138
grape seed in, Fbdy. 924 75
hair pin in, Fbdy. 837 23
hinge from toy in, Fbdy. 749 21
hooked shaped object in, Fbdy. 785 22
horse (toy) in, Fbdy. 926 141
jack stone, toy, in, Fbdy. 915 140
Fbdy. 963 142
Fbdy. 997 143
Fbdy. 1046 144
metal dog in, Fbdy. 698 138
metal slug in, Fbdy. 1000 166
metal washer in, Fbdy. 703 150
opera glasses (toy) in, Fbdy. 914 139
orange seed in, Fbdy. 641 57
Fbdy. 969 80
peach seed in, Fbdy. 1057 85
pin (common) in, Fbdy. 712 32
Fbdy. 1062 35
plate (toy) in, Fbdy. 947 141
prune seed in, Fbdy. 1126 89
ring, finger, in, Fbdy. 1051 29
safety pin in, Fbdy. 651 37
Fbdy. 695 38
Fbdy. 713 39
Fbdy. 731 40
Fbdy. 747 41
Fbdy. 766 42
Fbdy. 813 45
Fbdy. 836 45
Fbdy. 850 45
Fbdy. 862 46
Fbdy. 889 47
Fbdy. 929 47
Fbdy. 942 48
Fbdy. 951 48
Fbdy. 981 48
Fbdy. 1018 50
Fbdy. 1039 50
Fbdy. 1040 51
Fbdy. 1066 51
Fbdy. 1071 52
Fbdy. 1084 53
Fbdy. 1111 54
Fbdy. 1113 55
Fbdy. 1122 55
Fbdy. 1135 56
Fbdy. 1140 56
whistle in, Fbdy. 922 162
Fbdy. 999 143
Fbdy. 1059 144
Fish Bones, Fbdy. 646 92
Fbdy. 714 94
Fbdy. 777 96
Fbdy. 778 96
Fbdy. 779 97
Fbdy. 784 97

Fbdy. 809 97
Fbdy. 814 98
Fbdy. 820 99
Fbdy. 853 99
Fbdy. 863 100
Fbdy. 883 101
Fbdy. 895 101
Fbdy. 910 102
Fbdy. 923 102
Fbdy. 938 102
Fbdy. 1132 104
Fbdy. 1045 106
Food, chewing gum, Fbdy. 698 113
dry custard, Fbdy. 720 113
fish, portions, Fbdy. 854 115
food particles, Fbdy. 700 113
food bolus, Fbdy. 795 116
food, Fbdy. 897 116
Fbdy. 1038 117
Fbdy. 1049 117
Fbdy. 1077 117
Fbdy. 1129 118
Fbdy. 661 107
Fbdy. 672 108
Fbdy. 688 108
Fbdy. 765 109
Fbdy. 808 109
Fbdy. 811 109
Fbdy. 821 110
Fbdy. 812 110
Fbdy. 826 110
Fbdy. 845 111
Fbdy. 888 116
Fbdy. 943 111
Fbdy. 1001 111
Fbdy. 1012 112
Fbdy. 1025 112
Fbdy. 1036 112
Fbdy. 1052 113
orange skin, Fbdy. 858 115
Fbdy. 908 116
orange pulp, Fbdy. 1115 117
Fbdy. 1146 118
paper or fabric, Fbdy. 903 116
peas (three) Fbdy. 804 115
Foreign Bodies
Fbdy. 631 Quarter in esophagus 145
632 Penny in larynx 145
633 Maize in rt. Bronchus 57
634 Staple in left bronchus 17
635 Shawl pin in rt. bronchus 31
636 Screw in rt. bronchus 19
637 Pork bone in esophagus 92
638 Lamb bone in esophagus 92
639 Bone in esophagus 92
640 Penny in esophagus 145
641 Orange seed in esophagus 57
642 Penny in esophagus 146
643 Dental reamer in rt. bronchus 124
644 Brass headed tack in rt. bronchus 9
645 Electric bulb from mouth gag in left bronchus 124
646 Fish bone in larynx 92
647 Peanut kernel in left bronchus 57
648 Nail in left bronchus 15
649 Brass disc in esophagus 146
650 Shawl pin in left bronchus 31
651 Safety pin (open) in esophagus 37
652 Safety pin (open) in alimentary tract. Recovered in stools No endoscopy.
653 Band gold crown in left bronchus 124
654 Tack in left bronchus 15
655 Penny in esophagus 146
656 Half dollar in esophagus 147
657 Penny in esophagus 147
658 Maize in left bronchus 57
659 Umbrella tip in rt. bronchus 21
660 Safety pin (open) in rt. bronchus 38
661 Meat in esophagus 107

662 Pin (common) in Pharynx 31
663 Button in alimentary tract; no endoscopy.
664 Staple in left bronchus 19
665 Nickel in esophagus 147
666 Dental reamer in rt. bronchus 124
667 Chicken bone in esophagus 93
668 Tack in rt. bronchus 6
669 Tooth plate (artificial denture) (portion) in esophagus 125
670 Safety pin (open) in trachea 38
671 Nickel in esophagus 148
672 Meat in esophagus 108
673 Pin (common) in rt. bronchus; coughed up after endoscopy.
674 Bone in esophagus 93
675 Gold tooth bridge in rt. bronchus 125
676 Brass headed tack in rt. bronchus 9
677 Brass headed tack in bronchus 9
678 Cartridge blank in left bronchus 21
679 Intubation tube in left bronchus 126
680 Penny in esophagus 148
681 Penny in esophagus 148
682 Peanut kernel in left bronchus 57
683 Dental reamer in left bronchus 126
684 Screw in rt. bronchus 19
685 Bone in esophagus 93
686 Screw in rt. bronchus 20
687 Brass headed tack in rt. bronchus 10
688 Meat bolus in esophagus 108
689 Toy metal dog in esophagus 138
690 Staple in rt. bronchus 17
691 Penny in esophagus 149
692 Penny in esophagus 149
693 Button in esophagus 118
694 Brass headed tack in rt. bronchus 10
695 Safety pin (open) in esophagus 38
696 Peanut kernel in rt. bronchus 58
697 Safety pin (open) in left bronchus 39
698 Chewing gum in strictured esophagus 113
699 Glass lens in esophagus 123
700 Food particles in strictured esophagus 113
701 Safety pin (open) in trachea 39
702 Penny in esophagus 149
703 Metal washer in esophagus 150
704 Collar button in left bronchus; coughed up after bronchoscopy.
705 Button in esophagus 119
706 Chicken bone in larynx 94
707 Brass headed tack in rt. bronchus 10
708 Tack in rt. bronchus 7
709 Tooth (portion) in rt. bronchus 127
710 Pin (common) in rt. bronchus 31
711 Brass disc in esophagus 150
712 Pin (common) in esophagus 32
713 Safety pin (open) in esophagus 39
714 Fish bone in esophagus 94
715 Shawl pin in left bronchus 32
716 Tooth filling in rt. bronchus 127
717 Safety pin (open) in larynx 40
718 Collar button (portion) in left bronchus 28

719 Watermelon seed in bronchus 58
720 Food (dried custard) in strictured esophagus 113
721 Marble in esophagus 138
722 Prune seed in trachea 58
723 Cockle burr in rt. bronchus 59
724 Watermelon seed in left bronchus 59
725 Peanut kernel in rt. bronchus 59
726 Shawl pin in rt. bronchus 32
727 Peanut kernel in rt. bronchus 68
728 Tack in left bronchus 7
729 Beef bone in esophagus 94
730 Penny in esophagus 150
731 Safety pin (open) in esophagus 40
732 Watermelon seed in rt. bronchus 68
733 Pin (common) in rt. bronchus 32
734 Safety pin (closed) in trachea 41
735 Peanut kernel in rt. and left bronchi 68
736 Almond kernel in rt. bronchus 68
737 Nickel in esophagus 151
738 Bean in rt. bronchus 69
739 Penny in esophagus 151
740 Nickel in esophagus 151
741 Pin (common) in left bronchus 33
742 Two closed safety pins in trachea 41
743 Chestnut kernel in rt. bronchus 70
744 Penny in esophagus 152
745 Nickel in esophagus 152
746 Brass headed tack in rt. bronchus 11
747 Safety pin (open) in esophagus 41
748 Beauty pin in left bronchus 28
749 Hinge from toy in rt. bronchus 21
750 Peanut kernel in rt. bronchus 70
751 Beef bone in esophagus 95
752 Pork bone in esophagus 95
753 Tooth in rt. bronchus 128
754 Pennies (two) in esophagus 153
755 Button (portion) in rt. bronchus 119
756 Peanut kernel in trachea 71
757 Tracheotomy tube in trachea 128
758 Safety pin (open) in left bronchus 42
759 Button in esophagus 119
760 Bone in esophagus 95
761 Bent wire in lingual tonsil; removed indirect method
762 Quarter in esophagus 153
763 Walnut kernel in rt. bronchus 71
764 Tack in rt. bronchus 11
765 Meat in esophagus 109
766 Safety pin (open) in esophagus 42
767 Peanut kernel in left bronchus 71
768 Safety pin (open) in rt. bronchus 43
769 Peanut kernel in trachea 50
770 Pencil ferrule in left bronchus 22
771 Nickel in esophagus 153
772 Nail in left bronchus 15
773 Tooth plate (artificial denture) (portion) in left bronchus 129
774 and
775 Two thumb tacks in rt. bronchus 7
776 Bone in esophagus 96

777 Shad bone in left tonsil 96
778 Fish bone in pharynx 96
779 Fish bone in pharynx 97
780 Tin disc in esophagus 154
781 Peanut kernel in rt. bronchus 60
782 Glass from Chrismas tree ball in larynx 139
783 Maize in trachea 60
784 Fish bone in pharynx 97
785 Hook shaped object in esophagus 22
786 Safety pin (open) in larynx 43
787 Peanut kernel in trachea and left bron. 60
788 Pencil top in left bronchus 23
789 Peanut kernel in rt. bronchus 61
790 Maize in trachea 61
791 Nickel in esophagus 154
792 Prune Seed in trachea 61
793 Portion knitting needle in esophagus; escaped in stools following esophagoscopy.
794 Safety pin (open) in rt. bronchus 43
795 Food bolus in esophagus 114
796 Quarter in esophagus 154
797 Penny in esophagus 155
798 Pin (common) in rt. bronchus 33
799 Peanut kernel in rt. bronchus 61
800 Peanut shell in trachea 62
801 Tack in pharynx 6
802 Peanut kernel in rt. bronchus 62
803 Penny in esophagus 155
804 Peas in strictured esophagus 115
805 Maize in trachea 62
806 Safety pins (two closed) in stomach 44
807 Quarter in esophagus 156
808 Meat bolus in esophagus 108
809 Fish bone in pharynx 97
810 Penny in esophagus 156
811 Meat in esophagus 109
812 Meat in esophagus 110
813 Safety pin (open) in esophagus 45
814 Fish bone in left tonsil 98
815 Peanut kernel in left bronchus 62
816 Half dollar in esophagus 157
817 Chicken bone in esophagus 98
818 Pieces of glass in esophagus 123
819 Watermelon seed in trachea 63
820 Fish bone in esophagus 99
821 Meat in esophagus 110
822 Maize in trachea 63
823 Peanut kernel in trachea 63
824 Watermelon seed in left bronchus 19
825 Staple in trachea 18
826 Meat in esophagus 110
827 Watermelon seed in trachea 64
828 Peanut kernel in rt. bronchus 64
829 Penny in esophagus 157
830 Quarter in esophagus 158
831 Sewing machine needle in rt. bronchus 33
832 Chestnut kernel in left bronchus 64
833 Coffee bean in left bronchus 64
834 Wire in larynx 20
835 Pin (common) in left bronchus 33
836 Safety pin (open) in esophagus 45
837 Hair pin in esophagus 23
838 Maize in left bronchus 55
839 Watermelon seed in rt. bronchus 65

840 Root tooth in rt. bronchus 129
842 Quarter in esophagus 158
843 Piece lead pipe in left bronchus 24
844 Tooth in rt. bronchus 130
845 Meat in strictured esophagus 111
846 Peanut kernel in rt. bronchus 65
847 Shawl pin in rt. bronchus 34
848 Safety pin (open) in left upper lobe bronchus; portion coughed up after breaking by bronchoscopy. Patient to return after fragment sags lower.
849 Diphtheric membrane in trachea and bronchi 173
850 Safety pin (open) in esophagus 45
851 Pin (common) in left bronchus 34
852 Button in esophagus 120
853 Fish bone in pharynx 99
854 Portions of fish in esophagus 115
855 Gold crown in rt. bronchus 130
856 Peanut kernel in rt. bronchus 65
857 Bone in esophagus 99
858 Orange pulp in strictured esophagus 115
859 Tack in left bronchus 8
860 T-shaped pin in rt. bronchus 34
861 Bone in bronchus 100
862 Safety pin (open) in esophagus 46
863 Fish bone in pharynx 100
864 Nickel in esophagus 159
865 Campaign button in esophagus 120
866 Quarter in esophagus 159
867 Bone in rt. bronchus 100
868 Penny in esophagus 159
869 Pin (common) in rt. bronchus 34
870 No foreign body
871 Peanut kernel in left bronchus 66
872 Almond kernel in rt. bronchus 66
873 Tooth brush bristle in pharynx; removed indirect method
874 No foreign body.
875 Peanut kernel in left bronchus 67
876 Bullet in lung tissue 137
877 Peanut kernel in rt. bronchus 67
878 Quarter in esophagus 160
879 Bone in esophagus 101
880 Peanut kernel in rt. bronchus 72
881 Safety pin (open) in larynx 46
882 Gold tooth crown in rt. bronchus 131
883 Fish bone in pharynx 101
884 Peanut kernel in rt. bronchus 72
885 Safety pin (open) in nasopharynx 46
886 Quarter in esophagus 160
887 Tooth plate (artificial denture) in esophagus 131
888 Food in strictured esophagus 116
889 Safety pin (open) in esophagus 47
890 Peanut kernel in rt. bronchus 72
891 Peanut kernel in bronchus 72
892 Peanut kernel in trachea 73
893 Button in esophagus 121
894 Button in esophagus 121
895 Fish bone in larynx 101
896 Penny in esophagus 160
897 Food in strictured esophagus 116

898 Portion corn stalk in rt. bronchus 73
899 Safety pin (open) in trachea 47
900 Bean in trachea 73
901 Spring catch from tonsil forcep in rt. bronchus 131
902 Beef bone in esophagus 102
903 Food in strictured esophagus 116
904 Peanut kernel in left bronchus 73
905 Peanut kernel in left bronchus 74
906 Penny in esophagus 161
907 Tack in rt. bronchus8
908 Orange skin in strictured esophagus 116
909 Quarter in esophagus 161
910 Fish bone in pharynx 102
911 Watermelon seed in trachea 74
912 Pin (common) in hypopharynx 35
913 Nail in rt. bronchus 16
914 Toy opera glasses in esophagus 139
915 Jackstone in esophagus 140
916 Disc in esophagus 161
917 Brass headed tack in left bronchus 12
918 Watermelon seed in trachea 74
919 Watermelon seed in trachea 75
920 Peanut kernel in rt. bronchus 75
921 Nail in left bronchus 16
922 Disc in esophagus 162
923 Fish bone in pharynx 102
924 Grape seed in strictured esophagus 75
925 Rifle bullet in rt. bronchus 137
926 Toy horse in esophagus 141
927 Watermelon seed in trachea 75
928 Watermelon seed in trachea 76
929 Safety pin (open) in esophagus 47
930 Metallic object in rt. bronchus 24
931 Maize in trachea 76
932 Peanut kernel in rt. bronchus 24
933 Nail in rt. bronchus 13
934 Tooth plate (artificial denture) in esophagus 132
935 Penny in esophagus 162
936 Peanut kernel in rt. bronchus 76
937 Tooth plate (artificial denture) in esophagus 132
938 Fish bone in pharynx 102
939 Maize in rt. bronchus 77
940 Portion apple stem in bronchus 77
941 Tack in rt. bronchus 6
942 Safety pin (open) in esophagus 48
943 Meat bolus in strictured esophagus 111
944 Watermelon seed in trachea 77
945 Portion food rubber doll in rt. bronchus 141
946 Peanut kernel in rt. bronchus 77
947 Toy saucer in esophagus 141
948 Maize in rt. bronchus 78
949 Maize in trachea 78
950 Nickel in esophagus 163
951 Safety pin (open) in esophagus 48
952 Quarter in esophagus 163
953 Peanut kernel in trachea 78
954 Collar button in esophagus 29
955 Crayon in trachea 142

956 Job's tear in left bronchus 78
957 Quarter in esophagus 163
958 Maize in left bronchus 79
959 Penny in esophagus 164
960 Nickel in esophagus 164
961 Penny in esophagus 164
962 Bean in trachea 79
963 Jackstone in esophagus 142
964 Peanut kernel in left bronchus 79
965 Tooth plate (artificial denture) in esophagus 132
966 Tooth in rt. bronchus 132
967 Pin (common) in left bronchus 24
968 Paper fastener in rt. bronchus 24
969 Orange seed in strictured esophagus 80
970 Chicken bone in larynx 103
971 Patent button in esophagus 121
972 Half dollar in esophagus 165
973 Almond kernel in trachea and left bron. 80
974 Tack in left bronchus 8
975 Staple in rt. bronchus 18
976 Canna Seed in rt. bronchus 80
977 Penny in esophagus 165
978 Surgical drain in pleural cavity 133
979 Collar button in esophagus 29
980 Cockle burr in larynx 80
981 Safety pin (open) in esophagus 48
982 Portion oyster shell in esophagus 103
983 Bone in esophagus 104
984 Safety pin (open) in hypopharynx 49
985 Tack in rt. bronchus 14
986 Shawl pin in left bronchus 35
987 Bone in esophagus 104
988 Fish bone in pharynx 104
989 Button in esophagus 122
990 Safety pin (open) in hypopharynx 49
991 Peanut kernel in left bronchus 81
992 Safety pin (open) in larynx 49
993 Pennies (two) in esophagus 165
994 Fish bone in pharynx; removed indirect method.
995 Button in esophagus 122
996 Button in esophagus 122
997 Jackstone in esophagus 143
998 Penny in esophagus 166
999 Whistle in esophagus 143
1000 Penny in esophagus 166
1001 Meat in esophagus 111
1002 Peanut kernel in trachea 81
1003 Tack in rt. bronchus 14
1004 Coffee berry in left bronchus 81
1005 Fish bone in pharynx removed indirect method.
1006 Safety pin (open) in larynx 49
1007 Penny in esophagus 166
1008 Fish bone in pharynx; removed indirect method
1009 Tack in left bronchus 25
1010 Fish bone in pharynx; removed indirect method.
1011 Screw in left bronchus 25
1012 Meat in esophagus 112
1013 Bone in esophagus 105
1014 Peanut kernel in rt. bronchus 91
1015 Nickel in esophagus 167

1016 Penny in esophagus 167
1017 Penny in esophagus 167
1018 Safety pin (open) in esophagus 50
1019 Peanut kernel in rt. bronchus 81
1020 Job's tear in trachea 86
1021 Cedar leaves in pharynx 87
1022 Fish bone in pharynx; removed indirect method
1023 Chicken bone in esophagus 105
1024 Peanut kernel in left bronchus 82
1025 Meat bolus in esophagus 112
1026 Fish bone in pharynx; removed indirect method
1027 Metal disc in esophagus 168
1028 Quarter in esophagus 168
1029 Penny in esophagus 169
1030 Portion egg shell in esophagus 87
1031 Maize (fresh) in strictured esophagus 83
1032 Tooth plate (artificial denture)in esophagus 134
1033 Quarter in esophagus 169
1034 Cartridge shell in left bronchus 138
1035 Nickel in esophagus 169
1036 Meat in esophagus 112
1037 Christmas tree, ornament in left bronchus 143
1038 Food in esophagus 117
1039 Safety pin (open) in esophagus 50
1040 Safety pin (open) in esophagus 51
1041 Ball bearing ball in rt. bronchus 25
1042 Almond shell in rt. bronchus 84
1043 Watermelon seed in trachea 86
1044 Peanut kernel in rt. bronchus 82
1045 Fish bone in esophagus 106
1046 Jackstone in esophagus 144
1047 Penny in esophagus 170
1048 Watermelon seed in rt. bronchus 86
1049 Food bolus in esophagus 117
1050 Nickel in esophagus 170
1051 Baby ring in esophagus 29
1052 Meat bolus in strictured esophagus 113
1053 Penny in esophagus 170
1054 Pencil cap in left bronchus 25
1055 Needle in pharynx 35
1056 Tack in rt. bronchus 26
1057 Peachstone in esophagus 85
1058 Safety pin (open) in rt. bronchus 51
1059 Whistle in esophagus 144
1060 Fish bone in oropharynx; removed indirect method
1061 Screw in rt. bronchus 26
1062 Pin (common) in esophagus 35
1063 Penny in esophagus 171
1064 Fish bone in rt. tonsil; removed indirect method
1065 Penny in esophagus 171
1066 Safety pin (open) in esophagus 51
1067 Bone (sliver of) in rt. lingual tonsil removed indirect method
1068 Bean in rt. bronchus 85
1069 Fish bone in lingual tonsil; removed indirect method

1070 Whistle (brass reed) left bronchus 144
1071 Four safety pins (open) in esophagus 52
1072 Maize in rt. bronchus 83
1073 Safety pin (open) in rt. bronchus 52
1074 Tooth plate (artificial denture) in esophagus 134
1075 Shawl pin in left bronchus 37
1076 Safety pin (open) in pharynx 53
1077 Food in strictured esophagus 117
1078 Fish bone in left tonsil; removed indirect method
1079 Maize in rt. bronchus 83
1080 Tooth brush bristle in rt. tonsil; removed indirect method
1081 Pin (common) in pharynx 36
1082 Particle vegetable fibre in pharynx; removed indirect method
1083 Fish bone in left pyriform sinus; removed indirect method
1084 Safety pin (open) in esophagus 53
1085 Safety pin (open) in rt. bronchus 53
1086 Collar button in rt. bronchus 30
1087 Bone in esophagus 106
1088 Paper fastener in oropharynx; removed by indirect method
1089 Quarter in esophagus 171
1090 Watermelon seed in left bronchus 86
1091 Button in esophagus 123
1092 Safety pin (open) in larynx 54
1093 Carpet tack in rt. bronchus 26
1094 Portion of wire in pharynx 135
1095 Screw in left bronchus 26
1096 Peanut kernel in left bronchus 83
1097 Pin (common) in hypopharynx 36
1098 Peanut kernel in left bronchus 87
1099 Fish bone in rt. tonsil; removed indirect method
1100 No foreign body
1101 Bone in esophagus 106
1102 Penny in esophagus 172
1103 Pin (common) in rt. bronchus 36
1104 Nail in left bronchus 27
1105 Pin (Beauty) in left bronchus 30
1106 Dental brace (gold) in left bronchus 136
1107 Dental plate (artificial denture) in esophagus 135
1108 Peanut kernel in rt. bronchus 82
1109 Fish bone in pharynx; removed indirect method
1110 Fish bone in pharynx; removed indirect method
1111 Safety pin (open) in esophagus 54
1112 Bristle in pharynx; removed indirect method
1113 Safety pin (open) in pharynx 55
1114 Safety pin (closed) in larynx 54
1115 Orange pulp in strictured esophagus 117

1116 Fish bone in rt. tonsil; removed indirect method
1117 Brass headed tack in rt. bronchus 27
118 Peanut kernel in rt. bronchus 87
1119 Bronchial cast in tracheobron. tree 88
1120 Safety pin (open) in larynx 55
1121 Tooth in rt. bronchus 136
1122 Safety pin (open) in esophagus 55
1123 Peanut kernel in rt. bronchus 88
1124 Portion of crab shell in esophagus 89
1125 Bone in esophagus 107
1126 Prune stone in esophagus 89
1127 Maize in rt. bronchus 84
1128 Piece of bone in pleural cavity 107
1129 Bolus of meat in strictured esophagus 118
1130 Tooth plate (artificial denture) in esophagus 135
1131 Portion of shell (projectile) removed by thorocopuncture.
1132 Bone in esophagus 104
1133 Cork in rt. bronchus 90
1134 Safety pin (open) in stomach 55
1135 Safety pin (open) in esophagus 56
1136 Tooth in rt. bronchus 136
1137 Metal disc in esophagus 172
1138 Safety pin (open) in rt. bronchus 56
1139 Bean in rt. bronchus 89
1140 Safety pin (open) in esophagus 56
1141 Walnut kernel in rt. bronchus 90
1142 Safety pin (open) in oropharynx 56
1143 Portion of stone and clothing in left lung 90
1144 Maize in trachea 84
1145 Peanut kernel in left bronchus 89
1146 Orange pulp in strictured esophagus 118
1147 Fish bone in left tonsil; removed by indirect method
1148 Brass headed tack in rt. bronchus 27
1149 Quarter in esophagus 172
1150 Fish bone in rt. tonsil; removed by indirect method
1151 Pin (common) in larynx 37
1152 Maize in rt. bronchus 91
1153 Tooth filling in left bronchus 136
1154 Maize in right bronchus 91
1155 Chicken bone in esophagus 105
GLASS from breast pump, Fbdy. 818 123
Glass lens from flashlight, Fbdy. 699 123
Glass marble, Fbdy. 721 138
Glass from Christmas tree, Fbdy. 782 139
Grape seed, Fbdy. 924 75
HAIR PIN, Fbdy. 837 23
Hardware, ball bearing ball, Fbdy. 1041 25
brass headed tack, Fbdy. 664 9
" " " " 676 9
" " " " 677 9
" " " " 687 10
" " " " 694 10
" " " " 707 10
" " " " 746 11
" " " " 764 11

" " " " 917 12
" " " " 933 13
" " " " 985 14
" " " " 1003 14
" " " " 1009 25
" " " " 1117 27
" " " " 1148 27
hinge from toy, Fbdy. 749 21
hook shaped object, Fbdy. 785 22
lead pipe, portion, Fbdy. 843 24
metallic object, Fbdy. 930 24
nails, Fbdy. 648 15
" " 654 15
" " 772 15
" " 913 16
" " 921 16
" " 1104 27
paper fastener, Fbdy. 968 24
pencil ferrule, Fbdy. 770 22
pencil cap and eraser, Fbdy. 788 23
screw, Fbdy. 636 19
" " 684 19
" " 686 20
" " 1011 25
" " 1061 26
" " 1095 26
staple, Fbdy. 634 17
" " 690 17
" " 825 18
" " 975 18
" " 664 19
tacks, (thumb), in bronchus, Fbdy. 774-775 7
tack, carpet, Fbdy. 668 6
" " " 708 7
" " " 728 8
" " " 801 6
" " " 859 8
" " " 941 6
" " " 907 8
" " " 974 8
" " " 1056 26
" " " 1093 26
washer, metal, Fbdy. 703 150
Half-dollars, Fbdy. 656 147
" " " 816 157
Hinge, from toy, Fbdy. 749 21
Hook shaped object, Fbdy. 785 22
Horse, toy, Fbdy. 926 141
Intubation tube, Fbdy. 679 126
Jack stones, toy, Fbdy. 915 140
Fbdy. 963 142
Fbdy. 997 143
Fbdy. 1046 144
Jewelry, beauty pin, Fbdy. 748 28
beauty pin, Fbdy. 1105 30
collar button, Fbdy. 718 28
" " " 954 29
" " " 979 29
" " " 1086 30
ring (finger), Fbdy. 979 29
Job's tear (coix lachryma Jobi.) Fbdy. 956 78
Fbdy. 1020 86
Lamb bone, Fbdy. 638 92
Lamp, electric, from mouth gag, in bronchus, Fbdy. 645 124
Larynx, chicken bone in, Fbdy. 706 94
cockleburr in, Fbdy. 980 80
coin (penny) in, Fbdy. 632 145
common pin in, Fbdy. 1151 37
fish bone in, Fbdy. 646 92
glass from Christmas tree ball in, Fbdy. 782 139
safety pin in, Fbdy. 717 40
" " " " 881 46
" " " " 992 49
" " " " 1006 49
" " " " 1092 54
" " " " 1114 54
" " " " 1120 65
tack in, Fbdy. 801 6
Lead pipe, portion, Fbdy. 843 24
Maize, in bronchus, 633 57
Fbdy. 658 57
" 783 60
" 790 61
" 805 62
" 822 63
" 838 65
" 931 76
" 939 77
" 948 78
" 949 78
" 958 79
" 1072 83
" 1079 83

" 1127 84
" 1144 84
" 1152 91
" 1154 91
Marble, toy, Fbdy. 721 138
Meat, Fbdy. 661 107
Fbdy. 672 108
" 688 108
" 765 109
" 808 109
" 811 109
" 812 110
" 821 110
" 826 110
" 845 111
" 943 111
" 1001 111
" 1012 112
" 1025 112
" 1036 112
" 1052 112
NAIL in bronchus, Fbdy. 648 15
Fbdy. 654 15
" 772 15
" 913 16
" 921 16
" 1104 27
Needles, Sewing machine needle, Fbdy. 831 33
Needle, Fbdy. 1055 35
Nickels, five-cent piece (coin), Fbdy. 665 147
" 671 148
" 737 151
" 740 152
" 745 152
" 771 153
" 791 154
" 864 159
" 868 159
" 950 163
" 960 164
" 1007 166
" 1015 166
" 1035 166
" 1050 170
Nuts, almond, Fbdy. 736 68
almond, Fbdy. 872 66
" " 973 80
" " 1042 84
chestnut, Fbdy. 743 70
chestnut hull, (see supplement), Fbdy 832 64
peanut kernel, Fbdy. 647 57
" " " 682 57
" " " 696 58
" " " 724 68
" " " 725 59
" " " 750 70
" " " 756 71
" " " 767 71
" " " 769 60
" " " 781 60
" " " 787 60
" " " 799 61
" " " 802 62
" " " 815 62
" " " 823 63
" " " 828 64
" " " 846 65
" " " 856 65
" " " 871 66
" " " 875 67
" " " 877 67
" " " 880 72
" " " 884 72
" " " 890 72
" " " 891 72
" " " 892 73
" " " 904 73
" " " 905 74
" " " 920 75
" " " 932 76
" " " 936 76
" " " 946 77
" " " 953 78
" " " 964 79
" " " 991 81
" " " 1002 81
" " " 1019 81
" " " 1024 82
" " " 1044 82
" " " 1108 82
" " " 1096 83
" " " 1098 87
" " " 1118 87
walnut kernel, Fbdy. 763 71
OPERA glasses (toy), Fbdy. 914 139

Orange seeds, Fbdy. 641 57
Fbdy. 969 80
Paper fasteners, Fbdy. 968 24
Fbdy. 860 34
Patent clasp button, Fbdy. 971 121
Peach pit, Fbdy. 1057 85
Peanut kernels, Fbdy. 647 57
Fbdy. 682 57
" 696 58
" 724 68
" 750 70
" 756 71
" 767 71
" 769 60
" 781 60
" 787 60
" 799 61
" 802 62
" 815 62
" 823 63
" 828 63
" 846 65
" 856 65
" 871 66
" 875 67
" 877 67
" 880 72
" 884 72
" 890 72
" 891 72
" 892 73
" 904 73
" 905 74
" 920 75
" 932 76
" 936 76
" 946 77
" 953 78
" 964 79
" 991 81
" 1002 81
" 1019 81
" 1024 82
" 1044 82
" 1096 83
" 1098 87
" 1108 82
" 1118 87
Pencil ferrules, Fbdy. 770 22
Fbdy. 1054 25
Pencil top, Fbdy. 788 23
Pennies, Fbdy. 632 145
Fbdy. 640 145
" 642 146
" 655 146
" 657 147
" 686 148
" 681 148
" 691 149
" 692 149
" 702 149
" 730 150
" 739 151
" 744 152
" 754 (two together) 153
" 797 155
" 803 155
" 810 156
" 829 157
" 896 160
" 906 161
" 935 162
" 959 164
" 961 164
" 977 165
" 993 (two together) 165
" 998 166
" 1016 167
" 1017 167
" 1029 169
" 1047 170
" 1053 170
" 1063 171
" 1065 171
" 1102 172
Pharynx and hypopharynx
cedar leaves in, Fbdy. 1021 87
common pin in, Fbdy. 662 31
common pin in, Fbdy. 912 35
common pin in, Fbdy. 1081 36
common pin in hypopharynx, Fbdy. 1097 36
dental brace (wire) in, Fbdy. 1094 135
fish bone in laryngopharynx, Fbdy. 883 101
needle in, Fbdy. 1055 35

safety pin in nasopharynx, Fbdy. 885 46
safety pin in hypopharynx, Fbdy. 984 49
safety pin in hypopharynx, Fbdy. 990 49
safety pin in, Fbdy. 1076 53
safety pin in hypopharynx, Fbdy. 1142 46
wire (bent) in, Fbdy. 834 20
Pins, beauty pins, Fbdy. 748 28
Fbdy. 1105 30
common pins, Fbdy. 662 31
Fbdy. 710 31
" 712 32
" 733 32
" 741 33
" 798 33
" 835 33
" 851 34
" 869 34
" 912 35
" 1062 35
" 1081 36
" 1097 36
" 1103 36
" 1151 37
desk pin, Fbdy. 860 34
hair pin, Fbdy. 837 23
safety pins, Fbdy. 651 37
Fbdy. 660 38
" 670 38
" 695 38
" 697 39
" 701 39
" 713 39
" 717 40
" 731 40
" 734 41
" 742 41
" 747 41
" 758 42
" 766 42
" 768 43
" 786 43
" 794 43
" 806 44
" 813 45
" 836 45
" 850 45
" 862 46
" 881 46
" 885 46
" 889 47
" 899 47
" 929 47
" 942 48
" 951 48
" 981 48
" 984 49
" 990 49
" 992 49
" 1006 49
" 1018 50
" 1039 50
" 1040 51
" 1058 51
" 1066 51
" 1071 52
" 1073 52
" 1076 53
" 1084 53
" 1085 53
" 1092 54
" 1111 54
" 1114 54
" 1120 55
" 1113 55
" 1122 55
" 1134 55
" 1135 56
" 1138 56
" 1140 56
" 1142 56
shawl pins, Fbdy. 635 31
Fbdy. 650 31
" 715 32
" 726 32
" 847 34
" 986 35
" 1075 37
T-shaped pin, Fbdy. 860 34
Pits, prune pit, Fbdy. 722 58
Fbdy. 792 61
" 1126 89
peach pit, Fbdy. 1057 85
Platé (toy) pewter, Fbdy. 947 141
Pleural cavity, surgical drain in,

Fbdy. 978 133
Pork bones, Fbdy. 637 92
Fbdy. 752 95
" 861 100
" 1087 106
Prune pits, Fbdy. 722 58
Fbdy. 792 61
" 1126 89
QUARTERS (coins), Fbdy. 631 145
Fbdy. 762 153
" 796 154
" 807 156
" 830 158
" 842 158
" 878 160
" 886 160
" 909 161
" 952 163
" 957 163
" 1028 168
" 1033 169
" 1089 171
REAMERS (dental), Fbdy. 643 124
Fbdy. 666 124
" 683 126
Rifle bullet, Fbdy. 925 137
Ring (finger), Fbdy. 979 29
SAFETY PINS, open, Fbdy. 651 37
Fbdy. 660 38
" 670 38
" 695 38
" 697 39
" 701 39
" 713 39
" 717 40
" 731 40
" 734 41
" 742 41
" 747 41
" 758 42
" 766 42
" 768 43
" 786 43
" 794 43
two closed linked together, Fbdy.
open, Fbdy. 813 45
" 836 45
" 850 45
" 862 46
" 881 46
" 885 46
" 889 47
" 899 47
" 929 47
" 942 48
" 951 48
" 981 48
" 984 49
" 990 49
" 992 49
" 1006 49
" 1018 50
" 1039 50
" 1040 51
" 1058 51
" 1066 51
" 1071 52
" 1073 52
" 1076 53
" 1084 53
" 1085 53
" 1092 54
" 1111 54
" 1114 54
" 1120 55
" 1113 55
" 1122 55
" 1134 55
" 1135 56
" 1140 56
" 1138 56
" 1142 56
Screws, wood and machine, Fbdy. 636 19
Fbdy. 684 19
" 686 20
" 1011 25
" 1061 26
" 1095 26
Seeds, nuts and shells
almond kernels, Fbdy. 736 68
Fbdy. 872 66
" 973 80
almond shell, Fbdy. 1042 84
apple stem (portion), Fbdy. 940 77
beans, Fbdy. 738 69
Fbdy. 900 73
Fbdy. 962 79

Fbdy. 1068 85
Fbdy. 1139 89
canna seed, Fbdy. 976 80
cedar leaves, Fbdy. 1021 87
chestnut kernels, Fbdy. 743 70
Fbdy. 832 64
cockleburrs, Fbdy. 723 59
Fbdy. 980 80
coffee beans, Fbdy 833 64
Fbdy. 1004 81
cork, portion, (bark), Fbdy. 1133 90
corn stalk (portion) (maize), Fbdy. 898 73
crab shell (portion) (crustacean,) Fbdy 1124 89
egg-shell (portion), Fbdy. 1030 87
grape seed, Fbdy. 924 75
Job's tears, Fbdy. 956 78
Fbdy. 1020 86
maize, dried, Fbdy. 633 57
Fbdy. 658 57
" 783 60
" 790 51
" 805 62
" 822 63
" 838 65
" 931 76
" 939 77
" 948 78
" 949 78
" 958 79
" 1072 83
" 1079 83
" 1127 84
" 1144 84
" 1152 91
" 1154 91
maize (fresh), Fbdy 1031 83
maize stalk, Fbdy 898 73
orange seeds, Fbdy. 641 57
Fbdy. 969 80
peach pits, Fbdy. 1057 85
peanut kernels, Fbdy. 647 57
Fbdy. 682 57
" 696 58
" 724 68
" 750 70
" 756 70
" 767 71
" 769 60
" 781 60
" 787 60
" 799 61
" 802 62
" 815 62
" 823 63
" 828 63
" 846 65
" 856 65
" 871 66
" 875 67
" 877 67
" 880 72
" 884 72
" 890 72
" 891 72
" 892 73
" 904 73
" 905 74
" 920 75
" 932 76
" 936 76
" 946 77
" 953 78
" 964 79
" 991 81
" 1002 81
" 1019 81
" 1024 82
" 1044 82
" 1096 83
" 1098 87
" 1108 82
" 1118 87
prune pits, Fbdy, 722 58
Fbdy. 792 61
" 1126 89
walnut kernel, Fbdy. 763 71
watermelon seeds, Fbdy. 719 58
Fbdy. 724 58
" 732 68
" 819 63
" 827 64
" 824 63
" 839 65
" 911 74
" 918 74
" 919 75

" 927 75
" 928 76
" 944 77
" 1043 86
" 1048 86
" 1090 86
SHAWL PINS.
Fbdy. 635 31
" 650 31
" 715 32
" 726 32
" 847 34
" 986 35
" 1075 37
Staples
Fbdy. 634 17
" 664 19
" 690 17
" 825 18
" 975 18
Stomach
safety pin in, Fbdy. 695 38
two safety pins linked together, in, Fbdy. 806 44
safety pin in, Fbdy. 1134 55
Surgical objects,
electric light from mouth gag, Fbdy. 645 124
intubation tube, Fbdy. 679 126
portion of tracheotomy tube, Fbdy. 757 128
spring catch from tonsil forceps, Fbdy. 901 131
surgical drain, Fbdy 978 133
T-SHAPED PIN, Fbdy. 860 34
Tacks, brass "umbrella" headed, Fbdy. 664 9
Fbdy. 676 9
" 677 9
" 687 10
" 694 10
" 707 10
" 746 11
" 764 11
" 917 12
" 933 13
" 985 14
" 1003 14
" 1009 25
" 1117 27
" 1148 27
carpet, Fbdy. 668 6
Fbdy. 708 7
" 728 8
" 801 6
" 859 8
" 941 6
" 907 8
" 974 8
" 1056 26
" 1093 26
thumb (two together in bronchus), Fbdy. 774-775 7
Teeth. (portion), Fbdy. 709 127
tooth, Fbdy. 753 128
Fbdy. 844 130
root, Fbdy. 840 129
tooth, Fbdy. 966 132
Fbdy. 1121 136
" 1136 136
Tonsil, fish bone in, Fbdy. 814 98
Fbdy. 853 99
" 863 100
" 883 101
" 895 101
" 910 102
" 923 102
" 938 102
fragment of bent wire in, Fbdy. 834 20
Tooth plates (portion), Fbdy. 669 125
(portion), Fbdy. 773 129
Fbdy. 887 131
Fbdy. 934 132
" 937 132
(portion), Fbdy 965 132
Fbdy. 1032 134
Fbdy. 1074 134
" 1107 135
Tooth fillings, amalgam filling, Fbdy. 716 127
filling, Fbdy. 1153 136
Toys, hinge from toy, Fbdy. 749 21
metal dog, Fbdy. 689 138
glass marble, Fbdy. 721 138
glass from Christmas ball, Fbdy. 782 139
brass reed from horn, Fbdy 1070 144

crayon (portion), Fbdy. 955 142
doll's foot (rubber), Fbdy. 945 141
horse, Fbdy. 926 141
jackstones, Fbdy. 915 140
Fbdy. 963 142
" 997 143
" 1046 144
plate (toy dinner), Fbdy. 947 141
opera glasses (toy), Fbdy. 914 139
whistles, Fbdy. 922 162
Fbdy. 999 143
" 1059 144
Christmas tree ornament, Fbdy. 1037 143
Trachea, bean in, Fbdy. 900 73
chicken bone in, Fbdy. 970 103
crayon in, Fbdy. 955 142
maize, grains of, in, Fbdy. 790 61
Fbdy. 805 62
" 931 76
" 949 78
" 822 63
" 1144 84
Trachea, peanut kernel in, Fbdy. 756 71
Fbdy. 769 60
" 823 63
" 891 72
" 892 73
" 953 78
" 1002 81
prune seed in, Fbdy. 722 58
Fbdy. 792 61
safety pin in, Fbdy. 670 38
Fbdy. 701 39
" 734 41
" 742 41
" 899 47
staple in, Fbdy. 825 18
tracheotomic cannula (portion) in, Fbdy, 757 128
watermelon seed in, Fbdy. 827 64
Fbdy. 911 74
" 918 74
" 919 75
" 927 75
" 928 76
" 944 77
" 1043 86
Tracheotomic cannula (portion), Fbdy. 757 128
UMBRELLA headed brass tacks, Fbdy 664 9
" 676 9
" 677 9
" 687 10
" 694 10
" 707 10
" 746 11
" 764 11
" 917 12
" 933 13
" 985 14
" 1003 14
" 1009 25
" 1117 27
" 1148 27
Umbrella tip, Fbdy. 659 21
VEAL bones, Fbdy. 1013 105
WALNUT kernel, Fbdy. 763 71
Watermelon seeds, Fbdy. 719 58
Fbdy. 724 59
" 732 68
" 819 63
" 824 63
" 827 64
" 839 65
" 911 74
" 918 74
" 919 75
" 927 75
" 928 76
" 944 77
" 1043 86
" 1048 86
" 1090 86
Whistles, Fbdy. 922 162
Fbdy 999 143
" 1059 144
Wires, Fbdy. 834 20
Fbdy. 761 20